

Appendices

Appendix A

Scoping Report

Draft Scoping Summary
Department of Health and Human Services
Centers for Disease Control and Prevention
Roybal Campus 2025 Master Plan EIS for CDC's Edward R. Roybal Campus

I. Introduction

The Centers for Disease Control and Prevention (CDC) within the Department of Health and Human Services (HHS) is preparing an Environmental Impact Statement (EIS) for the proposed Roybal Campus 2025 Master Plan for CDC's Edward R. Roybal Campus located at 16000 Clifton Road NE., in Atlanta, Georgia. The EIS will be prepared pursuant to the National Environmental Policy Act (NEPA), as implemented by the Council on Environmental Quality (CEQ) Regulations (40 CFR part 1500-1508) and the Department of Health and Human Services (HHS) General Administration Manual Part 30 Environmental Procedures, dated February 25, 2000.

The scoping process is an integral part of NEPA compliance and serves to identify the full range of environmental issues and alternatives to be evaluated in an EIS. The scoping process provides an opportunity for the public and agencies to comment on the proposed project, with the intent of establishing the scope and content of the EIS. This is done by informing interested persons, organizations, and governmental agencies about the proposed project and seeking input on project alternatives, potential project issues and impacts. A summary of the scoping activities that was conducted as part of the EIS for the Roybal Campus 2025 Master Plan, as well as a summary of the scoping comments received during the scoping period, are provided below.

II. Summary of Scoping Notices

Notice of Intent

A Notice of Intent (NOI) was published on December 17, 2012 in the *Federal Register* to notify the public of CDC's intent to prepare an EIS for the proposed Roybal Campus 2025 Master Plan. The publication of the NOI was the first step in the scoping process and initiated the public comment period (December 12, 2012 through February 1, 2013). The NOI announced CDC's intent to hold public scoping meetings. A copy of the NOI is included in Appendix A.

Notices in Local Newspapers and Websites

An advertisement providing the NOI information was published in the legal notice section of the *Atlanta Journal Constitution* on December 20, 2012, January 4, 2013, January 11, 2013 and January 14, 2013; and on the North Druid Hills – Briarcliff Patch website from January 14 through January 17, 2013. Appendix B contains the advertisements that were published.

Scoping Letters

Scoping letters, providing NOI information and scoping meeting information, were sent out to relevant federal, state, and local agencies, non-governmental organizations, and interested parties. A copy of the distribution list and scoping letters to agencies and interested parties are provided in Appendix C.

III. Scoping Meeting Summary

A public scoping meeting was held on January 17, 2013 at the CDC Edward R. Roybal Campus, Tom Harkin Global Communications Center (Building 19), Auditorium A, 1600 Clifton Road NE., Atlanta, GA. The scoping meeting was announced in the NOI, as well as advertised in the local newspapers, on the DeKalb County website and on other community websites.

The scoping meeting consisted of an open house where attendees were able to view informational material on the proposed action, potential future alternatives, the NEPA process, and obtain forms to guide them in participating in the NEPA process. The informational material, which included display boards, brochures, and comment forms, are provided in Appendix D. Written scoping comment forms were provided to attendees who wished to provide written comments on the scope of the EIS. Written comments were accepted at the meeting, could be mailed to CDC, or submitted electronically via the Federal Rulemaking Portal at www.regulations.gov, identified by Docket No. CDC-2012-0013, by February 1, 2013. Written comments received are provided in Appendix E.

The scoping meeting included a presentation by CDC, followed by a formal comment period during which attendees were given the opportunity to make verbal comments. Attendees who wished to provide a verbal statement were asked to fill out a speaker card and were called upon individually by a moderator during the comment period. The presentation and comment period portion of the scoping meeting was recorded by a stenographer. An American Sign Language interpreter was present at the meeting and closed captioning was provided. A transcript of the meeting and all verbal comments received at the meeting were posted to the public docket at www.regulations.gov and are provided in Appendix F.

IV. Scoping Meeting and Scoping Period Results

A total of 18 people attended the public scoping meeting on January 17, 2013 and four people provided verbal comments during the formal comment period. A total of four written comments were received via mail and/or electronically via the Federal Rulemaking Portal at www.regulations.gov during the scoping comment period (See Appendix E). A summary of the written and verbal comments are provided in Table 1. All substantive comments identified during the scoping process were considered by the CDC during the EIS preparation process.

Table 1. Summary of Comments

Person/Affiliation	Summary of Comments	Response
Elizabeth Shirk GDNR, Historic Preservation Division	Acknowledge the initiation of Section 106 consultation process.	Noted.
Steven M. Wright NPS	No comments at this time.	Noted.
Matthew Early Emory University	Construction of new facilities on the Roybal Campus would increase traffic on Clifton Road and degrade the conditions of roads and increase congestion in surrounding neighborhoods.	Comment Noted.
	Recommends that no additional parking be provided on the Roybal Campus.	Comment Noted.
	Emory requests that a traffic impact study be completed.	A traffic impact study will be completed as part of the EIS.
	If substantial traffic impacts result from the project, CDC should support the initiation of projects to relieve main arteries.	Comment Noted.
	Visual Impacts of new buildings should be considered.	Comment Noted.
Heinz J. Muller EPA	EPA supports alternatives that focus on increasing the efficient use of existing space and natural resources.	Comment Noted.
	EIS should discuss CDC's mission requirements and future needs.	Comment Noted.
	Opportunities to integrate additional green space into the Master Plan should be considered.	Comment Noted.
	Best Management Practices (BMPs) for stormwater runoff should be implemented.	Comment Noted.
	Project should comply with Georgia's Erosion and Sediment Control Planning Manual, NPDES, Stormwater Management Program.	Comment Noted.
	Development within flood zones should be avoided.	Comment Noted.
	The proposed project should include resource conservation (green infrastructure) and pollution prevention measures incorporated in the project design and operation of CDC.	Comment Noted.
	EPA encourages CDC to work with surrounding neighbors to address transportation options to reduce vehicular congestion.	Comment Noted.

Person/Affiliation	Summary of Comments	Response
	Contractors should implement diesel emission reduction activities.	Comment Noted.
	Noise impacts should be predicted for the No Build and Build alternatives, as well as construction noise impacts.	Comment Noted.
	The EIS should examine the effects of alternatives on minority and/or low income populations and should consider children's health issues.	Comment Noted.
	The EIS should include a demographic analysis.	Comment Noted.
	If impacts to minority and low income populations are identified, efforts to minimize and mitigate adverse impacts should be analyzed.	Comment Noted.
	The EIS should assess impacts to archaeological sites and historic properties in accordance with Section 106 of the National Historic Preservation Act.	Comment Noted.
	EIS should discuss avoidance or minimization and procedures for unearthing archaeological sites during construction.	Comment Noted.
	The NEPA document should define and address indirect and cumulative impacts.	Comment Noted.
John Bugga Mason Mill Civic Association	What plans are there to maintain existing tree cover or any intentions to increase tree cover?	Natural Resources will be analyzed in the EIS.
	Emory University has a policy of no loss of tree cover.	Comment Noted.
Bruce Macgregor Druid Hill Civic Association	Traffic and transportation should be carefully considered.	A traffic impact study will be completed as part of the EIS.
	CDC should work with Emory University on alternative transportation options, mass transit and carpooling.	Comment Noted.
Ntale Kajumba EPA	Is the previous Master Plan available?	Master Plan is not a public document. Previous EIS will be made available via online depository.
Hal Foster Resident of Victoria Estates	The one mile radius does not include Victoria Estates. What does the one mile radius consist of?	1-mile radius was identified by the CDC as the study area for all the topics analyzed in the Environmental Impact Statement.

III. Projected Schedule for EIS Process

The DEIS will incorporate the issues identified during the scoping comment period. It will be prepared in compliance with all applicable federal and state requirements and guidelines. Upon review and acceptance of the DEIS by CDC, the document will be published and made available for public review. A public hearing will be held on the DEIS, similar in format to the Scoping Meeting. At the public hearing, members of the public, as well as interested groups and agencies will be able to submit oral and written comments on the DEIS. The Final EIS will include changes and/or additions to address comments on the DEIS, as well as written responses to each comment. After the FEIS is accepted by CDC, it will be published for public review. Based on the content of the FEIS, the CDC will prepare the required environmental “findings” and a “Record of Decision”, indicating the conclusions of the EIS process and the grounds on which a particular alternative was selected.

Scoping Summary Appendix A
Notice of Intent

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[Docket No. CDC-2012-0013]

Notice of Intent To Prepare an Environmental Impact Statement, Public Scoping Meeting, and Request for Comments; 2015–2025 Facilities Master Plan for Edward R. Roybal Campus in Atlanta, GA

AGENCY: Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS).

ACTION: Notice of intent; meeting announcement and request for comment.

SUMMARY: The Centers for Disease Control and Prevention (CDC) within the Department of Health and Human Services (HHS) announces its intent to prepare an Environmental Impact Statement (EIS) for the proposed 2015–2025 Facilities Master Plan for HHS/CDC's Edward R. Roybal Campus located at 1600 Clifton Road NE., in Atlanta, Georgia. This announcement follows the requirements of the National Environmental Policy Act of 1969 (NEPA) as implemented by the Council on Environmental Quality (CEQ) Regulations (40 CFR Part 1500–1508); and, the Department of Health and Human Services (HHS) General Administration Manual Part 30 Environmental Procedures, dated February 25, 2000.

DATES: A Public Scoping Meeting will be held on Thursday, January 17, 2013 in Atlanta, Georgia. The meeting will begin at 7 p.m. and end no later than 9 p.m. Written scoping comments must be received on or before Friday, February 1, 2013.

Deadline for Requests for Special Accommodations: Persons wishing to participate in the public scoping meeting who need special accommodations should contact George Chandler (gec2@cdc.gov or (404) 639–5153) by 5 p.m. Thursday, January 10, 2013.

ADDRESSES: The Public Scoping Meeting will be held at the CDC Edward R. Roybal Campus, Tom Harkin Global Communications Center (Building 19), Auditorium A, 1600 Clifton Road NE., Atlanta, GA 30333. You should be aware that the meeting location is in a Federal government building; therefore, Federal security measures are applicable. For additional information, please see Roybal Campus Security Guidelines under **SUPPLEMENTARY INFORMATION**.

You may submit comments identified by Docket No. CDC-2012-0013, by any of the following methods:

- *Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.

- *Mail:* George F. Chandler, Senior Advisor, Centers for Disease Control and Prevention, 1600 Clifton Road NE., Mailstop A-22, Atlanta, Georgia 30333.

Instructions: All submissions received must include the agency name and Docket Number. All relevant comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided. For access to the docket to read background documents or comments received, go to <http://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT:

George F. Chandler, Senior Advisor, Centers for Disease Control and Prevention, 1600 Clifton Road NE., Mailstop A-22, Atlanta, Georgia 30333; telephone (404) 639–5153.

SUPPLEMENTARY INFORMATION: HHS/CDC intends to prepare an Environmental Impact Statement (EIS) to analyze the potential impacts resulting from the proposed Roybal Campus 2015–2025 Facilities Master Plan. The Master Plan will guide the future physical development of the HHS/CDC Roybal Campus in Atlanta, GA, for the years 2015 to 2025. *The proposed Master Plan does not constitute authorization or funding for any specific construction project.*

Background

HHS/CDC is dedicated to protecting health and promoting quality of life through the prevention and control of disease, injury, and disability. HHS/CDC, headquartered on Clifton Road in Atlanta, Georgia since 1958, is recognized as the lead Federal agency for protecting the health and safety of people. HHS/CDC provides credible information to enhance health decisions, and promotes health through strong partnerships. HHS/CDC serves as the national focus for developing and applying disease prevention and control, environmental health, and health promotion and education activities designed to improve the health of the people of the United States.

Because the 2000–2009 Master Plan has been successfully implemented, HHS/CDC is planning to prepare a new Roybal Campus Facilities Master Plan for 2015–2025. The new Master Plan will cover a 10-year planning period and will examine potential growth in agency mission, laboratory and laboratory support space, office space

and personnel on the Roybal Campus. The Master Plan will also examine alternative ways of supporting potential mission change or growth at the Roybal Campus, including new construction of laboratory and office buildings, as well as better use of existing space to house potential growth. The Master Plan will evaluate opportunities for future development of the site, and consider the limits and capacity of both the Roybal Campus proper and the surrounding community. The potential impacts of future development on the natural and built environment will be evaluated.

In accordance with the National Environmental Policy Act of 1969 (NEPA) as implemented by the Council on Environmental Quality (CEQ) regulations (40 CFR Part 1500–1508), and the HHS environmental procedures, HHS/CDC will prepare an EIS for the proposed 2015–2025 Facilities Master Plan. Under NEPA, Federal agencies are required to evaluate the environmental effects of their proposed actions and a range of feasible alternatives to the proposed action before making a decision. Areas of concern include, but are not limited to: traffic and transportation; air quality; community services; natural resources; community and employee quality of life; and utilities (water and power).

Scoping Process

In accordance with NEPA, a Public Scoping process will be conducted to identify the range of major issues to be addressed relative to the proposed 2015–2025 Facilities Master Plan. “Scoping” is the early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to selecting and implementing one of several potential Roybal Master Plan alternatives. During the scoping process, HHS/CDC will actively seek input from interested people, organizations, and Federal, state, and regional agencies to identify environmental concerns to be addressed in the EIS. The purpose of this Notice is to inform interested parties regarding HHS/CDC's plan to prepare the EIS for the 2015–2025 Facilities Master Plan, to provide information on the nature of the Proposed Action and to initiate the scoping process. The Scoping Meeting will consist of an “Open House” from 7 p.m. to approximately 7:45 p.m., where HHS/CDC will make available a general site plan and publically available information on the current conditions of the Campus. HHS/CDC will also provide available data on possible future development

alternatives. Scoping comment cards will be provided at the Open House portion of the meeting for those who need to leave early but who wish to make a comment for the record. At approximately 8 p.m., HHS/CDC will give a brief overview of the current conditions and the planning and EIS processes. Individuals staying for this portion of the Scoping Meeting may make verbal statements or use a Scoping comment card. A stenographer will record this portion of the Scoping Meeting. An American Sign Language Interpreter will be available at both portions of the Scoping Meeting. The agenda is subject to change without notice. A transcript of the meeting and all comments received at the meeting will be posted to the public docket at www.regulations.gov.

Roybal Campus Security Guidelines

The Edward R. Roybal Campus is the headquarters of the U.S. Centers for Disease Control and Prevention and is located at 1600 Clifton Road NE., Atlanta, Georgia. The meeting is being held in a Federal government building; therefore, Federal security measures are applicable.

In planning your arrival time, please take into account the need to park and clear security. All visitors must enter the Roybal Campus through the entrance on Clifton Road; the guard force will direct visitors to the designated parking area. Visitors must present government issued photo identification (e.g., a valid Federal identification badge, state driver's license, state non-driver's identification card, or passport). Non-United States citizens must present a valid passport,

visa, Permanent Resident Card, or other type of work authorization document. All persons entering the building must pass through a metal detector. Visitors will be issued a visitor's ID badge at the entrance to Building 19 and will be escorted in groups of 5–10 persons to the meeting room. All items brought to HHS/CDC are subject to inspection.

Dated: December 11, 2012.

Tanja Popovic,

*Deputy Associate Director for Science,
Centers for Disease Control and Prevention.*

[FR Doc. 2012–30276 Filed 12–14–12; 8:45 am]

BILLING CODE 4163–18–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Administration for Children and Families

Submission for OMB Review; Comment Request

Title: Understanding the Dynamics of Disconnection from Employment and Assistance.

OMB No.: New Collection.

Description: The Office of Planning, Research and Evaluation, Administration for Children and Families (ACF), U.S. Department of Health and Human Services (HHS), is proposing a data collection activity to improve understanding of low-income individuals and families who are disconnected from employment and from public assistance and particularly those not receiving cash assistance through the Temporary Assistance for Needy Families (TANF) program. ACF is proposing to use a discussion guide to collect qualitative information. The

guide will be used to interview respondents in order to learn about their experiences with disconnection. Topics will include recent employment and reasons for not working; use of public benefit programs and reasons for using or not using specific benefits; their financial circumstances and material well-being including the stability and sources of income, housing and living arrangements; their coping strategies for addressing their circumstances; and their views on potential pathways to improve their financial and material well-being.

Information will be collected in two sites with relatively high concentrations of low-income families: Los Angeles, California and Southeast Michigan. Respondents will be sampled from two existing longitudinal surveys in those sites: The Best Start Los Angeles Pilot Community Evaluation, currently led by the Urban Institute's Health Policy Center and the Center for Healthier Children, Families and Communities at the University of California Los Angeles (UCLA), and the Michigan Recession and Recovery Study OIRTO, conducted by the National Poverty Center of the University of Michigan.

Respondents: Low-income women who have resident children and who are neither employed nor receiving TANF or Supplemental Security Income (SSI) for themselves. Women who are currently employed or receiving TANF may be included in the study if they experienced at least six months of unemployment in the past two years, had a child LId were unmarried during the period of unemployment, and were not receiving TANF at the time.

ANNUAL BURDEN ESTIMATES

Instrument	Annual number of respondents	Number of responses per respondent	Average burden hours per response	Total annual burden hours
Advertisement Script (LA)	300	1	0.1	30
Telephone Recruitment script and Screener (LA)	100	1	0.25	25
Follow-up Telephone Script to Schedule Interview (LA)	36	1	0.05	2
Consent Form for Interviews (LA)	36	1	0.2	7
Receipt of Payment Form (LA)	36	1	0.03	1
Consent Form for Linking Data (LA)	36	1	0.08	3
Telephone Recruitment Script and Screener (MI)	35	1	0.25	9
Consent Form for Interviews (MI)	30	1	0.2	6
Conversation Guide (LA and MI)	66	90	1.5	99

Estimated Total Annual burden hours: 182.

Additional Information: Copies of the proposed collection may be obtained by writing to the Administration for Children and Families, Office of Planning, Research and Evaluation, 370

L'Enfant Promenade SW., Washington, DC 20447, Attn: OPRE Reports Clearance Officer. All requests should be identified by the title of the information collection. Email address: OPREinfocollection@acf.hhs.gov.

OMB Comment: OMB is required to make a decision concerning the collection of information between 30 and 60 days after publication of this document in the **Federal Register**. Therefore, a comment is best assured of having its full effect if OMB receives it

Scoping Summary Appendix B
Newspaper Advertisements and Scoping Meeting Notices

to buy and demolish or
development some of those
part
asn't
ess.

Atlanta Journal Constitution December 20, 2012

County officials say
there's been a lot of stud-
ies over the years about
how to improve South
Cobb, but little action.

Green space has been
another hotly contested
issue, but Steve Levetan,
chairman of the Sandy
Springs Conservancy, said
the proposal appeared to
address most needs.

"While it could be ar-
gued that there could be
more green space, the plan must be
balanced," he said. "We
believe this is a balanced
plan."

The next step will be for
the city to continue prop-
erty acquisition in the
government complex area
and make street and side-
walk improvements along
the corridor.

More than \$20 million
has either been spent or
committed to the project
so far. City leaders say they
will consider more prop-
er purchases in 2013.

The proposal passed 5-2.
The current locks are
old parts are no longer
available.

Inmates can easily open
doors, even those in maxi-
mum security, using soap,
billet paper, pieces of cloth
or cardboard.

With inmates roaming
free around cellblocks,
staff and other inmates –
most of them not yet con-
victed of crimes – are in
danger of sexual assault or
severe attacks.

Alpharetta resident
Boccia has a 22-year-
old son who's been in and
out of the Fulton jail dur-
ing the past year awaiting
an armed robbery trial.

It doesn't sit well with
her knowing he's in a facil-
ity that can't keep inmates
in cells.

"As a mother, you def-
initely worry about your
child's safety," Boccia
said.

"Personally, I think it's
ridiculous that it's taken

"I am still at a loss as
to why our projects don't
forward
er proj-
one said. I don't
think the area lacks a vi-
sion for what could occur
here, but somehow our
vision is not being carried
through."

control services to Fulton
County for much longer.
The foundation says
it's losing money on the
contract, and Barking
Hound did not respond
to a recent county re-
quest for bids to provide
animal control services
in the future.

Fiery truck wreck on I-75 kills 3 people

Crash shuts down interstate north of Cartersville.

By Mike Morris
mmorris@ajc.com

A deadly truck wreck
early Wednesday shut
down I-75 in both direc-
tions north of Atlanta.

Three people were killed
in the fiery crash, which
occurred between Cartersville
and Adairsville in northern
Bartow County.

Georgia State Patrol
spokesman Gordy Wright

told The Atlanta Journal-
Constitution that a north-
bound tractor-trailer left
the roadway on the left
side, striking a guardrail
and a concrete pillar sup-
porting an overhead sign
and bursting into flames.

The sign fell onto the
southbound lanes and
was struck by a south-
bound tractor-trailer,
which then also ran off
the roadway.

The driver and a pas-
senger in the first truck
died, and the driver of
the second truck was al-
so killed, according to
Wright.

this long."

The faulty locks have
been a problem for Fulton
for well over a decade,
with county officials and
three different sheriffs' ad-
ministrations being
warned repeatedly that in-
mates can get past them.

It's one of two major is-
sues left that, if corrected,
would resolve a long-run-
ning federal lawsuit filed
by the Southern Center for
Human Rights on behalf
of inmates over danger-
ous, dirty and overcrowd-
ed conditions.

Most of the \$140 million
that has been spent com-
plying with the consent
decree has gone toward
extensive renovations and
for renting beds in other
jails to keep the number of
inmates in Fulton's lock-
up below a cap Shoob set
at 2,500.

Chief Jailer Mark Adger
said it will take about four
months to install the new
locks and six months to a

year to satisfy Shoob and
the plaintiffs' attorneys
that they work.

After Wednesday's vote,
Eaves said the county
will file a request with the
court before the end of the
year asking to be let out of
the order.

The Southern Center
for Human Rights and
an expert working for
Shoob have said oversight
shouldn't end until the
county has complied with
all the requirements of the
consent decree, including
replacing all locks and hav-
ing enough staff working at
the lockup all the time.

Adger said the Sheriff's
Office needs to hire 30 to
50 employees to solve the
staffing problem.

"The obligation of the
county is clear," said Mel-
anie Velez, and attorney for
the Southern Center for
Human Rights. "The de-
tainees of the county jail
need to be kept in a safe
environment."

cision to ban the use
of bullhooks, a sharp-
tipped tool used to train
elephants. Critics say
bullhooks inflict pain on
the animals.

Atlanta, which hosts
the Ringling Bros. and
Barnum & Bailey Circus,
declined to adopt a simi-

Bennett said the city
ultimately hopes to reach
a long-term agreement
with the county on ani-
mal control services.

Legal Notices

Department of Health and Human Services,
Centers for Disease Control and Prevention

Notice of Intent to Prepare an Environmental
Impact Statement, Public Scoping Meeting
and Request for Comments

The Centers for Disease Control and Preven-
tion (CDC) within the Department of Health
and Human Services (HHS) intends to prepare
an Environmental Impact Statement (EIS) in
accordance with the National Environmental
Policy Act of 1969 (NEPA) to analyze the po-
tential impacts of the proposed 2015-2025 Faci-
lities Master Plan for HHS/CDC's Edward R.
Roybal Campus located at 1600 Clifton Road,
N.E. in Atlanta, Georgia. The Master Plan will
guide the future physical development of the
HHS/CDC Edward R. Roybal Campus for the
years 2015 to 2025.

In accordance with NEPA, a Public Scoping
process will be conducted to identify the
range of major issues to be addressed rela-
tive to the proposed 2015-2025 Facilities
Master Plan. During the scoping process, HHS/CDC
will actively seek input from interested per-
sons, organizations, and federal, state, and
regional agencies to identify environmental
concerns to be addressed in the EIS. The pur-
pose of this Notice of Intent is to inform in-
terested parties regarding HHS/CDC's plan to
prepare the EIS for the 2015-2025 Facilities
Master Plan, to provide information on the
nature of the Proposed Action and to initiate
the scoping process.

Public Scoping Meeting: The public scoping
meeting for the 2015-2025 Facilities Master
Plan EIS will be held on January 17, 2013
from 7:00 to 8:00 p.m. at the CDC Edward R.
Roybal Campus, Thomas R. Harkin Global
Communications Center (Building 19), lo-
cated at 1600 Clifton Road N.E., Atlanta, GA
30333, Auditorium A. The scoping meeting
will be conducted as an "open house", where
visitors may come, receive information and
give comments.

Written Scoping Comments: If you are
unable to attend the public scoping meeting,
written comments can be submitted on or be-
fore February 1, 2013. You may submit
comments, identified by Docket No.
CDC-2012-xxxx, by any of the following
methods:

- Federal Rulemaking Portal:
<http://www.regulations.gov>. Follow the in-
structions for submitting comments.

- Mail: George F. Chandler, Senior Advisor,
Centers for Disease Control and Prevention,
1600 Clifton Road, N.E., Mailstop A-22, At-
lanta, Georgia 30333

Instructions: All submissions received must
include the agency name and Docket Number.
All relevant comments received will be posted
without change to <http://www.regulations.gov>,
including any personal information provided.
For access to the docket to read background
documents or comments received, go to
<http://www.regulations.gov>.

For Further Information Contact: George F.
Chandler, Senior Advisor, Centers for Disease
Control and Prevention, 1600 Clifton Road,
N.E., Mailstop A-22, Atlanta, Georgia 30333;
telephone 404.639.5153.

If you worked for Southeastern Fibre Drum
Co. in Atlanta from 1965-66, for Tommy Hay
Air Conditioning & Heating in Atlanta in 1966;
for Stewart Reid Heating and Air Condition-
ing Co. in Atlanta from 1972-73; or for
Southern Motor Carriers Assoc. in Atlanta
from 1974-1985, please contact Zac Cooper at
800-479-9533.

NOTICE OF SEIZURE AND INTENT TO FORFEIT
DEPARTMENT OF HOMELAND SECURITY,
CUSTOMS AND BORDER PROTECTION - Notice
is hereby given as required by 19 USC
1607 and 19 CFR 162.45 of the seizure and
intent to forfeit the property described below
which is in violation of Customs laws and/or
other pertinent statutes. Any person having
a legal interest therein and desiring to claim
any of the listed property must appear at the
Office of the Fines, Penalties and Forfeitures
Officer, U. S. Customs and Border Protection,
157 Tradeport Drive, Atlanta, GA 30354, and
file within 20 days of the date of the first
publication, a claim to such property and a
cost bond (in the appropriate amount). In

default of which, the property will be de-
clared forfeited to the United States and dis-
posed of in accordance with the law. Seizure
Number 20121704000448-01; Date of Seizure:
7/31/12; Place of Seizure: Atlanta, GA; De-
scription: \$46,515.19 USD; Law Violated: 18
USC981(a)(1)(A), 18USC1956 & 21USC881(a)
(6); Bond Amount: \$0.00; Seizure Number
20121704000444-01; Date of Seizure: 8/21/12;
Place of Seizure: Atlanta, GA; Description:
\$248,820.00 USD; Law Violated: 18
USC981(a)(1)(A), 18USC1956 & 21USC881(a)
(6); Bond Amount: \$0.00; Seizure Number
20121704000449-01; Date of Seizure: 8/24/12;
Place of Seizure: Atlanta, GA; Description:
\$210,000.00 USD; Law Violated: 18 USC981(a)
(1)(A), 18USC1956 & 21USC881(a)(6); Bond
Amount: \$0.00; Seizure Number
20121704000464-01; Date of Seizure: 9/5/12;
Place of Seizure: Atlanta, GA; Description:
\$5,151.00 USD; Law Violated: 18USC81(a)
(1)(C), 18USC1956, 18USC1961(1) & 18USC
1028; Bond Amount: \$0.00; Seizure Number
20121704000466-01; Date of Seizure: 9/6/12;
Place of Seizure: Atlanta, GA; Description:
\$6,800.00 USD & British Pounds valued at
\$18,163 at the time of seizure, Euros valued
at \$3,943.00 at the time of seizure & Nigerian
Naira valued at \$1,424.00 at the time of se-
izure; Law Violated: 31 USC 5316(a)(1)(B), 31
USC 5317(c)(2) & 31 USC 5332; Bond Amount:
\$0.00; Seizure Number 20121704000469-01;
Date of Seizure: 9/8/12; Place of Seizure: At-
lanta, GA; Description: \$13,481.00 USD;
Law Violated: 18 USC 5316, 5317, 5332;
Bond Amount: \$0.00; Seizure Number
20121704000472-01; Date of Seizure: 9/14/12;
Place of Seizure: Atlanta, GA; Description: 3
ultrasound systems; Law Violated: 22USC401,
22CFR123.22, 22CFR127.1, 22CFR127.2, &
19USC1595(d); Bond Amount: \$5,000.00; Seizure
Number 20121704000473-01; Date of
Seizure: 9/17/12; Place of Seizure: Atlanta, GA;
Description: Chase Bank acct#XXXXX9265
\$18,638.11 USD; Law Violated: 18 USC981(a)
(1)(A), 18USC1956 & 21USC881(a)(6); Bond
Amount: \$0.00; Seizure Number
20121704000489-01; Date of Seizure: 9/27/12;
Place of Seizure: Atlanta, GA; Description:
29,781 each counterfeit iPhone covers, 1,780
each counterfeit iPhone pad covers and 491
each counterfeit Apple AC power adapters,
3573 each counterfeit Kate Spade phone cov-
ers, 790 each counterfeit Chanel phone cases,
269 each counterfeit Louis Vuitton phone
cases, 8,948 each counterfeit Motorola
batteries, 457 each counterfeit Motorola
labels; Law Violated: 19 USC 1526(e);
Bond Amount: \$5,000.00; Seizure Number
20121704000033-01; Date of Seizure:
10/23/12; Place of Seizure: Atlanta, GA; De-
scription: \$20,920.00 USD; Law Violated:
18 USC981(a)(1)(A), 18USC1956 & 21USC881(a)
(a)(6); Bond Amount: \$0.00; Seizure Number
20131704000053-01; Date of Seizure: 11/8/12;
Place of Seizure: Atlanta, GA; Description:
\$8,830 USD; Law Violated: 18 USC981(a)(1)(A),
18USC1956 & 21USC881(a)(6); Bond Amount:
\$0.00;

I have applied to the
City of Atlanta for a
Change of ownership,
Retail package w/beer
and wine. ASR PAL
Corporation d/b/a Syl-
van Food Mart, 1709
Sylvan Rd, SW, Atlanta,
Ga 30310. Hearing to
be held by the License
Review board, 1/22/
2013, 5pm. 2nd floor,
Committee Room #2,
55 Trinity Ave. Renu
Pal, Agent

To see your legal ad on-line, go to:
www.ajc.com

Marylin Gailmore, 74, of Acworth
Sat-
owder
al
service, 2 p.m. Saturday, West
Metro Baptist Association, West
Georgia Crematory.

DEKALB COUNTY
Betty McCook, 81, of Stone
Mountain died Dec. 24. Memorial
service, 3 p.m. Saturday, Eternal
Hills Funeral Home, Snellville.

DOUGLAS COUNTY
Wayne C. Camp Jr., 80, of
Douglasville died Monday. Funeral,
2 p.m. Friday, Jones-Wynn Funeral
Home.
Norma Gail Dorris, 74, of
Douglasville died Monday. Fu-
neral, 11 a.m. Saturday, First United
Methodist Church, Whitley Garner
at Rosehaven.
Patricia Ann Sinyard, 65, of
Winston died Tuesday. Funeral, 11
a.m. Friday, Jones-Wynn Funeral
Home, Villa Rica.

GEORGIA
Richard Joel Beck, 27, of
Cedartown died Sunday. Funeral,
11 a.m. Saturday, Eastview Baptist
Church, Olin L. Gammage & Sons
Funeral Home.
**William Karl "Bud" Duck-
worth, 69**, of Tiger died Tuesday.
Graveside service, 11 a.m. today,
Roane Cemetery, Clayton. Beck
Funeral Home, Clayton.
Charles Samuel Finch, 80, of
Jefferson died Tuesday. Funeral, 11
a.m. Friday, Smith Funeral Home,
Winder.
Margaret Epting Medlock, 99,
of Athens died Monday. Graveside
service, 2 p.m. Saturday, Evergreen
Memorial Park. Bridges Funeral
Home.
Christopher Rouse, 26, of
Hoschton died Dec. 27. Memorial
service, 2 p.m. today, Evans Funeral
Home, Jefferson.
Rosalyn R. Wright, 46, of Green-
boro died Saturday. Funeral, 1 p.m.
today, Grace Fellowship Baptist
Church, Watts Funeral Home,
Union Point.

receive a lifetime achieve-
ment award from the Re-
cording Academy.
Page was born Nov. 8,
1927, as Clara Ann Fowler
in Claremore, Okla. The

echo effect from back-
up singers, but since Rael
and Page were footing the
bill, they decided Page
would do all the voices by
overdubbing.

H.M. PATTERSON & S.
ABERNATHY, William
BENTLEY, John
BITTER, John Jr.
DAUGHRIDGE, Nell
NOWAK, Theodore
PIPKIN, Mary
SMITH, Charlotte
HAUGABROOKS F.H.
SARDEN, Lois

HINES HOME OF FUNER
BRADLEY, Roderick
INGRAM BROTHERS F
HEATH, Sallie

LESTER LACKEY & SO
USHER, Judy

M. WILLIAM MURPHY
SNEED, Jane Norene

MCDONALD & SON F.
SHUMAN, Christopher

MURRAY BROTHERS
CLARK, Charlie Mae
KING, Sylvia

PARROTT FUNERAL HO
TODD, John Cecil

RALEIGH RUCKER F.
ADAMS, Bernice
ECHOLS, Carrie
GARNER, Alejandro

SANDY SPRINGS CHA
CLABORN, Kathryn

SCOT WARD FUNERAL
VERNER, Irma

SELLERS-SMITH F.H.
JOHNSON, W.J.

SMITH F.H.
BENTLEY, Paul

SOUTHCARE CREMATION
FUNERAL SOCIETY
BEHNING, Frank
BERRYHILL, Louise
CHAPMAN, Carroll
MOORE, Brenda

SPEER & SPEER
JENKINS, Boyd

THOMAS L. SCROGGS
BARRINGTON, Jerry

THOMAS POTEET & SO
F.H.
KIRBY, Hoyt

TIM STEWART F.H.
HILL, Johnny Lee

TOM M. WAGES F.H.
CLARKE, Alberta
JOHNSON, Royce

TRI-CITIES FUNERAL HO
SUTTON, Melba

WATTS F.H.
POPE, Joe

WEST COBB F.H.
CHEEK, C. Donald

WHITE COLUMNS CHA
BEAVERS, Dorothy

WILLIAM GAYLEANC
MURRAY & SON
JONES, Bobby

WILLIAMSON MORTUA
THOMPSON, Pandora

WILLIE A. WATKINS
BOWEN, Geraldine
DAVIS-STEWART, Dorothy
JENKINS, Margaret
JOHNSON, Llewelyn
LEWIS, Lillian
REYNOLDS, Lillie
THOMAS, Christopher
WALLER, Cynthia

OTHER
DANIEL, William

ADAMS, Bernice
Ms. Bernice Adams passed Janu-
2013. Homegoing Service will
held, Friday, January 4, 2013 at
PM at the Chapel of Raleigh Ru-
Dr. Joseph Crawford, Sr., officia-
Interment Resthaven Gardens
Memory. Please assemble at
Chapel at 12:30 PM. Raleigh Ru-
Funeral Home 404-288-7015.
Express condolences at ajc.com/

Legal Notices

Comcast Cable
Important Information About Your Channel
Lineup. Unincorporated South Fulton County,
GA. Effective 02-01-2013, Comcast Spotlight's
Real Estate TV programming on channel 26
(Limited Basic Tier) will be replaced by pro-
gramming provided by the City of East Point.
This change will affect customers living in
portions of unincorporated Fulton County
which may include your community.

Department of Health and Human Services,
Centers for Disease Control and Prevention

Notice of Intent to Prepare an Environmental
Impact Statement, Public Scoping Meeting
and Request for Comments

The Centers for Disease Control and Preven-
tion (CDC) within the Department of Health
and Human Services (HHS) intends to prepare
an Environmental Impact Statement (EIS) in
accordance with the National Environmental
Policy Act of 1969 (NEPA) to analyze the po-
tential impacts of the proposed 2015-2025 Fa-
cilities Master Plan for HHS/CDC's Edward R.
Roybal Campus located at 1600 Clifton Road,
N.E. in Atlanta, Georgia. The Master Plan will
guide the future physical development of the
HHS/CDC Edward R. Roybal Campus for the
years 2015 to 2025.

In accordance with NEPA, a Public Scoping
process will be conducted to identify the
range of major issues to be addressed relative
to the proposed 2015-2025 Facilities Master
Plan. During the scoping process HHS/CDC
will actively seek input from interested per-
sons, organizations, and federal, state, and
regional agencies to identify environmental
concerns to be addressed in the EIS. The pur-
pose of this Notice of Intent is to inform in-
terested parties regarding HHS/CDC's plan to
prepare the EIS for the 2015-2025 Facilities
Master Plan, to provide information on the
nature of the Proposed Action and to initiate
the scoping process.

Public Scoping Meeting: The public scop-
ing meeting for the 2015-2025 Facilities Mas-
ter Plan EIS will be held on January 17, 2013
from 7:00 to 9:00 a.m. at the CDC Edward R.
Roybal Campus, Thomas R. Harkin Global
Communications Center (Building 19), lo-
cated at 1600 Clifton Road N.E., Atlanta, GA
30333, Auditorium A. The scoping meeting
will be conducted as an "open house", where
visitors may come, receive information and
give comments.

Written Scoping Comments: If you are
unable to attend the public scoping meeting,
written comments can be submitted on or be-
fore February 1, 2013. You may submit
comments, identified by Docket No.
CDC-2012-xxxx, by any of the following
methods:

- Federal Rulemaking Portal:
<http://www.regulations.gov>. Follow the in-
structions for submitting comments.
- Mail: George F. Chandler, Senior Advisor,

Centers for Disease Control and Prevention,
1600 Clifton Road, N.E., Mailstop A-22, At-
lanta, Georgia 30333

Instructions: All submissions received must in-
clude the agency name and Docket Number.
All relevant comments received will be posted
without change to <http://www.regulations.gov>, in-
cluding any personal information provided.
For access to the docket to read background
documents or comments received, go to
<http://www.regulations.gov>.

For Further Information Contact: George F.
Chandler, Senior Advisor, Centers for Disease
Control and Prevention, 1600 Clifton Road,
N.E., Mailstop A-22, Atlanta, Georgia 30333;
telephone 404.639.5153.

INVITATION FOR BIDS
METROPOLITAN ATLANTA RAPID TRANSIT

will accept Bids as follows:
CP B27665 Job Order Contract. Pre-Bid Con-
ference January 15, 2013 at 10:00 a.m. Bid
Opening February 12, 2013 at 11:00 a.m. For
more information call Tahira Wilson at
404-848-4160.
To obtain a Bid document or CD, contact
MARTA's Contract Control Branch at
404-848-5580. You may also use a major
credit card to purchase Bid documents or CDs.
Bids should be received at 2424 Piedmont
Road, N.E., Lobby Floor, Atlanta, GA 30324 by
the aforementioned date and local time. En-
velopes containing bids MUST BE marked
with Bid Number and returned to the Con-
tract Control Branch. Contracts are subject to
Federal Grant Regulations and to MARTA's
Resolution on Equal Opportunity prohibiting
discrimination based on race, color, sex, reli-
gion or national origin.

View MARTA's Home Page
About MARTA
<http://www.ltsmarta.com>

I have applied to the
City of Atlanta for a
Convention center w/
beer, wine & liquor
consumed on premises
with customer dancing
& live entertainment
Change of Ownership
lic. for Proof of the
Pudding by MGR, Inc.
d/b/a Proof of the Pud-
ding at The World of
Coca Cola at 121 Baker
St, Atlanta, GA 30313.
Hearing to be held by
the Lic. Rev. Bd, 2/12/13
5 PM, 2nd floor, Comm.
Rm #2, 55 Trinity Ave.
Adam Noyes, Agent.

I have applied to the
City of Atlanta for a
new applicant, old lo-
cation, with liquor, beer
& wine ESB, LLC D/B/A
American Roadhouse
Restaurant, 842 North
Highland Ave., Atlanta
30306. Hearing to be
held by the License Re-
view board, 1/22/2013,
5PM, 2nd floor, Com-
mittee Room #2, 55
Trinity Ave. Emile Blau,
Agent.

Notice of Nondiscriminatory Policy as to Students

The Paidela School admits
students of any race, color,
national and ethnic origin to all
the rights, privileges, programs,
and activities generally accorded
or made available to students at
the school. It does not discriminate
on the basis of race, color, national
and ethnic origin, religion or sexual
orientation in administration of its
educational policies, admissions
policies, financial aid program,
and athletic and other
school-administered programs.

Glynn official's death a mystery

By Gordon Jackson
Brunswick News

Police found an emp-
ty holster and unfired bul-
lets belonging to a Glynn
County commissioner in-
side his car about 150
yards from where the of-
ficial's body was discov-
ered by a docked boat,
according to a list of evi-
dence contained in a po-
lice report.

The report by Glynn
County police also says
two empty prescrip-
tion bottles were collect-
ed from the car of Com-
missioner Tom Sublett.
Friends found Sublett's
car and body early Dec. 11
on St. Simons Island after
he failed to return home
from a poker game with
friends.

An autopsy determined
that Sublett, 52, drowned
after a gunshot to the
head. The Georgia Bureau
of Investigation's medi-
cal examiner still has not
determined whether the
death was a homicide or
suicide.

"The fact of the mat-
ter is suicide has not been

ruled out," Glynn Coun-
ty Police Chief Matt Dou-
ering said. "It is still be-
ing investigated as a ho-
micide because we've not
yet looked at all the evi-
dence."

Doering declined to
discuss the evidence list-
ed in the police report or
say whether investigators
have found a gun. Mike
McDaniel, the GBI agent
in charge of the investi-
gation, also declined to
comment.

Police said Sublett, 52,
was last seen at about
10:30 p.m. Dec. 10 when
he dropped off a friend
who had ridden with
him to the poker game at
the home of one of Sub-
lett's business partners.
The commissioner's wife
called friends and police
the next morning after he
failed to come home.

The report released by
Glynn County police said
Sublett's wallet was re-
covered with his driver's
license and credit cards
still inside.

Doering said the wallet
was in the commissioner's
back pocket.

ty's cities, where 90 percent of Fulton's residents now live.

Lawmakers will also approve new district maps and could eliminate Commissioner Robb Pitts' countywide seat, adding a new seat for north Fulton and significantly increasing the area's sway over the county.

Wednesday's vote to eliminate the in-house intergovernmental affairs division, which Pitts prompted, also put in question the jobs of Ligon and two other staffers. The panel left it to interim County Manager Da-

tions, which Vaquer has done in the past.

"It's not a bad strategy if they will truly do it," said Clint Mueller, legislative director of the Association County Commissioners of Georgia. "I think if (Commission Chairman) John Eaves is willing to go over there and discuss his issues directly with the delegation without using a lobbyist,

Commissioners also decided against hiring outside lobbyists with the firm Arnall Golden Gregory at a cost of \$260,416, saying that would send the wrong message to legislators who believe Fulton is bloated and wasteful.

Denying that contract and eliminating the in-house staff frees up more than \$400,000.

Legal Notices

s in jail

released on a \$25,000 bond. He was indicted in January 1983 on three counts of child molestation and two counts of incest. Several months later, Parker fled from Georgia before his trial could begin.

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Department of Health and Human Services,
Centers for Disease Control and Prevention

Notice of Intent to Prepare an Environmental
Impact Statement, Public Scoping Meeting
and Request for Comments

The Centers for Disease Control and Prevention (CDC) within the Department of Health and Human Services (HHS) intends to prepare an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act of 1969 (NEPA) to analyze the potential impacts of the proposed 2015-2025 Facilities Master Plan for HHS/CDC's Edward R. Roybal Campus located at 1600 Clifton Road, N.E. in Atlanta, Georgia. The 2015-2025 Facilities Master Plan will guide the future physical development of the HHS/CDC Edward R. Roybal Campus for the years 2015 to 2025.

In accordance with NEPA, a Public Scoping process will be conducted to identify the range of major issues to be addressed relative to the proposed 2015-2025 Facilities Master Plan. During the scoping process HHS/CDC will actively seek input from interested persons, organizations, and federal, state, and regional agencies to identify environmental concerns to be addressed in the EIS. The purpose of this Notice of Intent is to inform interested parties regarding HHS/CDC's plan to prepare the EIS for the 2015-2025 Facilities Master Plan, to provide information on the nature of the Proposed Action and to initiate the scoping process.

Public Scoping Meeting: The public scoping meeting for the 2015-2025 Facilities Master Plan EIS will be held on January 17, 2013 from 7:00 to 9:00 p.m. at the CDC Edward R. Roybal Campus, Thomas R. Harkin Global Communications Center (Building 19), located at 1600 Clifton Road N.E., Atlanta, GA 30333, Auditorium A. The scoping meeting will be conducted as an "open house", where visitors may come, receive information and give comments.

Written Scoping Comments: If you are unable to attend the public scoping meeting, written comments can be submitted on or before February 1, 2013. You may submit comments, identified by Docket No. CDC-2012-0013, by any of the following methods:

* Federal eRulemaking Portal:
<http://www.regulations.gov>. Follow the instructions for submitting comments.

* Mail: George F. Chandler, Senior Advisor, Centers for Disease Control and Prevention, 1600 Clifton Road, N.E., Mailstop A-22, Atlanta, Georgia 30333

Instructions: All submissions received must include the agency name and Docket Number. All relevant comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided. For access to the docket to read background documents or comments received, go to <http://www.regulations.gov>.

For Further Information Contact: George F. Chandler, Senior Advisor, Centers for Disease Control and Prevention, 1600 Clifton Road, N.E., Mailstop A-22, Atlanta, Georgia 30333. Telephone: 404.639.5153.

Place a
legal ad.

Call 404-526-5573



I have applied to the City of Atlanta for a Food store retail beer only new applicant/new location lic. Tyler International Group, LLC d/b/a Castleberry Point Market 110 Centennial Olympic Park Dr. NW Ste. 104A Atlanta, GA 30313. Hearing to be held by the License Review board, 1/22/13 5:00 PM 2nd floor, Committee Room #2, 55 Trinity Ave. Andre McFarland Tyler, Agent

I have applied to the City of Atlanta for a restaurant w/ beer & wine consumed on premise new applicant/new location lic. Tyler International Group, LLC d/b/a Super 7 Pizza Shoppe 110 Centennial Olympic Park Dr. NW Ste. 104B Atlanta, GA 30313. Hearing to be held by the License Review board, 1/22/13 5:00 PM 2nd floor, Committee Room #2, 55 Trinity Ave. Andre McFarland Tyler, Agent

I have applied to the City of Atlanta for a Retail Package Liquor, Beer & Wine Change of Ownership Lic. for Hemant Bhalla, Individual d/b/a/ Moreland Package Store 15 Moreland Ave SE Atlanta, GA 30316. Hearing to be held by the License Review Bd, 1/22/2013 5PM, 2nd flr, Comm. Room #2, 55 Trinity Ave. Hemant Bhalla, Agent

Hearings — Jan. 22 & 24, 2013

Board of Directors of the Metropolitan Atlanta Rapid Transit Authority (MARTA)
will hold public hearings for the purpose of considering

Service Modifications for April 20, 2013

and/or adjustments for the following bus routes:

operate a short
the North
undabout) and
between Inman Park/
on weekdays
unchanged
each Station
trips.

oad: Realign
and Linecrest
p Drive,
nents in the

services to dis-
tinction inbound to
ine to provide
ound from

Dixie Hills:
to New Jersey
ill be the new
the selected
ents. The
Drive, Morris
continued.
Flowers
na Street and
tions to Route

operate
assumes
vd./Dixie
ded by Route
follows from
eft-Waterbury
vers Drive,
ft-Verhena

Street, Right-Penelope Street, Left-Aaron Street, Right-Penelope Road, and Right-Anderson Avenue returning to West Lake Station. The segment along Verbena Street between Waterbury Drive and Chenault Place and along Chenault Place will be discontinued.

Route 86 — Fairington Road/McAfee Road:
Realign services to operate a short turn alignment from GRTA Panola Road Park and Ride Lot to the I-20 Access Road and Old Hillandale Drive on all service days during the hours that the Mall at Stonemont is closed.

Route 95 — Metropolitan Parkway/Hapeville:
Discontinue operation along the S. Central Avenue and Tradeport Blvd. segments. All trips will terminate at King Arnold Street and Sunset Avenue with the exception of the trips that provide direct service to Atlanta Technical and Atlanta Metropolitan Colleges.

Route 110 — Peachtree Street "The Peach":
Realign services to provide alternating trips between Five Points and Lenox Stations and Arts Center and Lenox Stations during the hours of 9:00 AM - 8:00 PM on all service days. Service between Arts Center and Five Points Stations will be discontinued before 9:00 AM and after 8:00 PM.

Route 172 — Sylvan Road/Virginia Avenue:
Realign services to assume the S. Central Avenue and Tradeport Blvd. segments discontinued by Route 95 — Metropolitan Parkway/Hapeville on selected trips on weekdays and Saturdays only. Service along this segment will not be provided on Sundays.

Route 186 — Rainbow Drive/South DeKalb:
Realign services with an extension along Wesley Chapel Road, Snapfinger Woods Drive, E. Wesley Chapel Road returning to Snapfinger Woods Drive, which will be the new terminus for Route 186. Service along the Pleasant Wood Drive and Eastside Drive segments will be provided inbound from the Snapfinger Woods Drive terminus in the AM and outbound before terminating at Snapfinger Woods Drive in the PM until 9:00 PM on all service days.

Thursday, Jan. 24

800 Commerce Dr, Decatur, 30030

Maloof Auditorium

7:00 p.m.

Community Exchange: 6-7 p.m.

riding MARTA: Walk one block west of
Decatur Rail Station.

ns will also be
424 Piedmont
business hours,

th the ADA and
(4) 848-4037.
s, information
he Deaf (TDD)

will be avail-
hearings and
a message at
f External Af-

fairs, 2424 Piedmont Road, N.E. Atlanta, GA 30324-3330; (3)
complete an online Comment Card at www.itsmarta.com; (4) or
fax your comments no later than January 27, 2013 to (404)
848-4179.

All citizens of the City of Atlanta and the counties of Fulton,
DeKalb, Clayton and Gwinnett whose interests are affected by the
subjects to be considered at these hearings are hereby notified
and invited to appear at said times and places and present such
evidence, comment or objection as their interests require.

Keith T. Parker, AICP General Manager/CEO

marta

We Serve With Pride

2424 Piedmont Rd NE, Atlanta, 30324

MARTA Headquarters

7:00 p.m.

Community Exchange: 6-7 p.m.

Riding MARTA: Across the street from
Lindbergh Center Station.

Department of Health and Human Services,
Centers for Disease Control and Prevention

Notice of Intent to Prepare an Environmental
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and Request for Comments

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In accordance with NEPA, a Public Scoping process will be conducted to identify the range of major issues to be addressed relative to the proposed 2015-2025 Facilities Master Plan. During the scoping process HHS/CDC will actively seek input from interested persons, organizations, and federal, state, and regional agencies to identify environmental concerns to be addressed in the EIS. The purpose of this Notice of Intent is to inform interested parties regarding HHS/CDC's plan to prepare the EIS for the 2015-2025 Facilities Master Plan, to provide information on the nature of the Proposed Action and to initiate the scoping process.

Public Scoping Meeting: The public scoping meeting for the 2015-2025 Facilities Master Plan EIS will be held on January 17, 2013 from 7:00 to 9:00 p.m. at the CDC Edward R. Roybal Campus, Thomas R. Harkin Global Communications Center (Building 19), located at 1600 Clifton Road N.E., Atlanta, GA 30333, Auditorium A. The scoping meeting will be conducted as an "open house", where visitors may come, receive information and give comments.

Please be advised that the meeting is being held in a Federal government building; therefore, Federal security measures are applicable. In planning your arrival time, please take into account the need to park and clear security. All visitors must enter the Roybal Campus through the entrance on Clifton Road; the guard force will direct visitors to the designated parking area. Visitors must present government issued photo identification (e.g., a valid Federal identification badge, state driver's license, state non-driver's identification card, or passport). Non-United States citizens must present a valid passport, visa, Permanent Resident Card, or other type of work authorization document. All persons entering the building must pass through a metal detector. Visitors will be issued a visitor's ID badge at the entrance to Building 19 and will be escorted in groups of 5-10 persons to the meeting room. All items brought to HHS/CDC are subject to inspection.

Written Scoping Comments: If you are unable to attend the public scoping meeting, written comments can be submitted on or before February 1, 2013. You may submit comments, identified by Docket No. CDC-2012-0013, by any of the following methods:

*Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments.

*Mail: George F. Chandler, Senior Advisor, Centers for Disease Control and Prevention, 1600 Clifton Road, N.E., Mailstop A-22, Atlanta, Georgia 30333

Instructions: All submissions received must include the agency name and Docket Number. All relevant comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided. For access to the docket to read background documents or comments received, go to <http://www.regulations.gov>.

For Further Information Contact: George F. Chandler, Senior Advisor, Centers for Disease Control and Prevention, 1600 Clifton Road, N.E., Mailstop A-22, Atlanta, Georgia 30333. Telephone: 404.639.5153.

INVITATION FOR BIDS
METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY (MARTA)

will accept Bids as follows:
RFP P27818 MARTA's Planning and Technical Services. Bid Opening January 23, 2013 at 2:00 p.m. For more information call Reginald Bryant at 404-848-4158.


CP B20200 CCTV System Expansion. Bid Opening February 1, 2013 at 2:00 p.m. For more information call Diane Akinsipe at 404-848-5521.

To obtain a Bid document or CD, contact MARTA's Contract Control Branch at 404-848-5580. You may also use a major credit card to purchase Bid documents or CDs. Bids should be received at 2424 Piedmont Road, N.E., Lobby Floor, Atlanta, GA 30324 by the aforementioned date and local time. Envelopes containing bids MUST BE marked with Bid Number and returned to the Contract Control Branch. Contracts are subject to Federal Grant Regulations and to MARTA's Resolution on Equal Opportunity prohibiting discrimination based on race, color, sex, religion or national origin.

View MARTA's Home Page
About MARTA
<http://www.itsmarta.com>

Legal ads.
404-526-5573





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Grocery Specials

Start Saving



Editor [Jonathan Cribbs](#) jonathan.cribbs@patch.com



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NorthDruidHills-BriarcliffPatch

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Government

Department of Health and Human Services, Centers for Disease Control Public Scoping Meeting, Notice of Intent to Prepare and Environmental Impact Statement, Public Scoping Meeting and Request for Comments

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The Centers for Disease Control and Prevention (CDC) within the Department of Health and Human Services (HHS) intends to prepare an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act of 1969 (NEPA) to analyze the potential impacts of the proposed 2015-2025 Facilities Master Plan for HHS/CDC's Edward R. Roybal Campus located at 1600 Clifton Road, N.E. in Atlanta, Georgia. The 2015-2025 Facilities Master Plan will guide the future physical development of the HHS/CDC Edward R. Roybal Campus for the years 2015 to 2025.

In accordance with NEPA, a Public Scoping process will be conducted to identify the range of major issues to be addressed relative to the proposed 2015-2025 Facilities Master Plan. During the scoping process HHS/CDC will actively seek input from interested persons, organizations, and federal, state, and regional agencies to identify environmental concerns to be addressed in the EIS. The purpose of this Notice of Intent is to inform interested parties regarding HHS/CDC's plan to prepare the EIS for the 2015-2025 Facilities Master Plan, to provide information on the nature of the Proposed Action and to initiate the scoping process.

Public Scoping Meeting: The public scoping meeting for the 2015-2025 Facilities Master Plan EIS will be held on January 17, 2013 from 7:00 to 9:00 p.m. at the CDC Edward R. Roybal Campus, Thomas R. Harkin Global Communications Center (Building 19), located at 1600 Clifton Road N.E., Atlanta, GA 30333, Auditorium A. The scoping meeting will be conducted as an "open house", where visitors may come, receive information and give comments.

Please be advised that the meeting is being held in a Federal government building; therefore, Federal security measures are applicable. In planning your arrival time, please take into account the need to park and clear security. All visitors must enter the Roybal Campus through the entrance on Clifton Road; the guard force will direct visitors to the designated parking area. Visitors must present government issued photo identification (e.g., a valid Federal identification badge, state driver's license, state non-driver's identification card, or passport). Non-United States citizens must present a valid passport, visa, Permanent Resident Card, or other type of work authorization document. All persons entering the building must pass through a metal detector. Visitors will be issued a visitor's ID badge at the entrance to Building 19 and will be escorted in groups of 5-10 persons to the meeting room. All items brought to HHS/CDC are subject to inspection.

Written Scoping Comments: If you are unable to attend the public scoping meeting, written comments can be submitted on or before February 1, 2013. You may submit comments, identified by Docket No. CDC-2012-0013, by any of the following methods:

- Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Mail: George F. Chandler, Senior Advisor, Centers for Disease Control and Prevention, 1600 Clifton Road, N.E., Mailstop A-22, Atlanta, Georgia 30333

Instructions: All submissions received must include the agency name and Docket Number. All relevant comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided. For access to the docket to read background documents or comments received, go to <http://www.regulations.gov>.

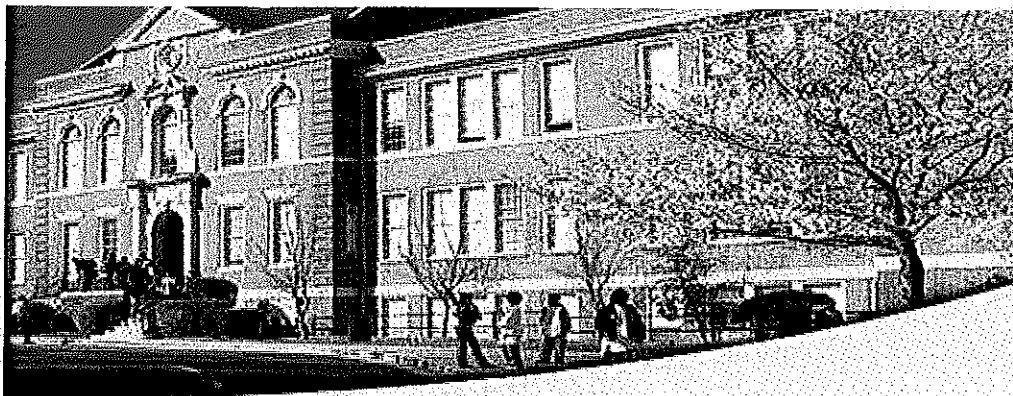
For Further Information Contact: George F. Chandler, Senior Advisor, Centers for Disease Control and Prevention, 1600 Clifton Road, N.E., Mailstop A-22, Atlanta, Georgia 30333. Telephone: 404.639.5153.

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Event Details

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[Submit an event](#)

CDC public scoping meeting / 2015-25 Master Plan update

WHEN	Thursday, January 17, 2013, 7 - 9pm
WHERE	HHS/CDC Edward R. Roybal Campus, Thomas R. Harkin Global Communications Center (Building 19 Auditorium A), located at 1600 Clifton Road N.E.
EVENT CATEGORY	Community Calendar
NOTE	<p>The CDC is in the process of updating its Master Plan for 2015-2025 and is gathering data from Clifton Corridor organizations in preparation for the required Environmental Impact Statement, which will analyze the potential impacts of their proposed plan on the Corridor.</p> <p>Federal security measures are applicable. Metal detectors in use, escorts in groups apply.</p>
LINK	www.gpo.gov...



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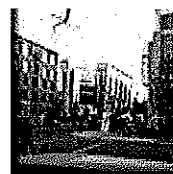
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ANYWHERE**



**COMMUTE
CREATIVELY**



**ENHANCE
NEIGHBORHOODS**



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Event Details

2015-2025 Facilities Master Plan Environmental Impact Statement

January 17, 2013 (7:00 pm - 9:00 pm)

CDC invites you to the public scoping meeting for the 2015-2025 Facilities Master Plan Environmental Impact Statement (EIS) January 17th from 7-9pm at the CDC Edward R. Roybal Campus, Thomas R. Harkin Global Communications Center (Bldg 19) Auditorium A at 1600 Clifton Road, NE, Atlanta, GA 30333. Join us to learn more about the plan and provide input on any issues of potential concern related to the Master Plan and EIS. The scoping meeting will be conducted as an open house.

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Scoping Summary Appendix C
Sample Scoping Letters and Distribution List



Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30333

George F. Chandler
Senior Advisor
Department of Health and Human Services
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., Mailstop A-22
Atlanta, GA 30333

Rob Holland
Chief-Public Affairs
US Army Corps of Engineers - South Atlantic Division
Room 9M15, 60 Forsyth Street SW
Atlanta, Georgia 30303

Dear Mr. Holland:

Re: Department of Health and Human Services, Centers for Disease Control and Prevention, 2015-2025
Facilities Master Plan EIS for HHS/CDC's Edward R. Roybal Campus, Atlanta, Georgia

The Centers for Disease Control and Prevention (CDC) within the Department of Health and Human Services (HHS) is preparing an Environmental Impact Statement (EIS) for the proposed 2015-2025 Facilities Master Plan (Master Plan) for HHS/CDC's Edward R. Roybal Campus (Roybal Campus) located at 1600 Clifton Road, N.E. in Atlanta, Georgia. The Master Plan will guide the future physical development of the Roybal Campus for the years 2015 to 2025.

The objective of the EIS is to evaluate the potential impacts to the natural and built environment that would result from the proposed 2015-2025 Facilities Master Plan for the Roybal Campus. The new Master Plan will cover a 10-year planning period and will examine potential growth in Agency Mission, laboratory and laboratory support space, office space and personnel on the Roybal Campus. The Master Plan will also examine alternative ways of accommodating potential Mission change or growth at the Roybal Campus, including new construction of laboratory and office buildings, as well as maximizing the efficiency and utilization of existing space to accommodate potential growth. The Master Plan will evaluate opportunities for future development of the site, taking into consideration constraints and carrying capacity of both the Roybal Campus proper and the surrounding community.

Conceptual alternatives to be evaluated in the Master Plan include: (1) taking no action; (2) increasing existing space efficiency; (3) new laboratory and office mix construction; (4) new laboratory construction only; (5) new office construction only; and, (4) off-site relocation.

The EIS will evaluate the potential impacts of future development of the campus as identified in the Master Plan. Issues that will be analyzed include the project's effect on traffic, air, noise, water quality, as well as other social, economic and environmental effects, including cumulative effects. As part of the process for determining the scope of issues to be addressed in the EIS and for identifying the important issues related to the proposed action, we request your input on the above issues and the EIS. A copy of the project location map and NOI is attached for your reference.

A public scoping meeting for the 2015-2025 Facilities Master Plan EIS will be held on January 17, 2013 from 7:00 to 9:00 p.m. at the CDC Edward R. Roybal Campus, Thomas R. Harkin Global Communications Center (Building 19), located at 1600 Clifton Road N.E., Atlanta, GA 30333, Auditorium A.



Agencies are requested to review the description of the proposed action and provide comments on the environmental issues within their jurisdiction and/or expertise. Written comments must be received on or before February 1, 2013. You may submit comments, identified by Docket No. CDC-2012-0013, by any of the following methods:

- Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Mail: George F. Chandler, Senior Advisor, Centers for Disease Control and Prevention, 1600 Clifton Road, N.E., Mailstop A-22, Atlanta, Georgia 30333

Instructions: All submissions received must include the agency name and Docket Number. All relevant comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided. For access to the docket to read background documents or comments received, go to <http://www.regulations.gov>.

Please be advised that the meeting is being held in a Federal government building; therefore, Federal security measures are applicable. In planning your arrival time, please take into account the need to park and clear security. All visitors must enter the Roybal Campus through the entrance on Clifton Road; the guard force will direct visitors to the designated parking area. Visitors must present government issued photo identification (e.g., a valid Federal identification badge, state driver's license, state non-driver's identification card, or passport). Non-United States citizens must present a valid passport, visa, Permanent Resident Card, or other type of work authorization document. All persons entering the building must pass through a metal detector. Visitors will be issued a visitor's ID badge at the entrance to Building 19 and will be escorted in groups of 5–10 persons to the meeting room. All items brought to HHS/CDC are subject to inspection.

For further information, please contact George F. Chandler at (404)639-5153. Thank you for your participation.

Sincerely,
George F. Chandler
Senior Advisor
Centers for Disease Control and Prevention



Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30333

George F. Chandler
Senior Advisor
Department of Health and Human Services
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., Mailstop A-22
Atlanta, GA 30333

James Wagner
President
Emory University
201 Dowman Drive
Atlanta, Georgia 30322

Dear President Wagner:

The Centers for Disease Control and Prevention (CDC) within the Department of Health and Human Services (HHS) recently issued a Notice of Intent to prepare an Environmental Impact Statement (EIS) to analyze the potential impacts of the proposed 2015-2025 Facilities Master Plan for HHS/CDC's Edward R. Roybal Campus located in Atlanta, Georgia. The Master Plan will guide the future physical development of the HHS/CDC's Edward R. Roybal Campus in Atlanta, GA, for the years 2015 to 2025. The proposed Master Plan does not constitute authorization or funding for any specific construction project.

The public scoping meeting for the 2015-2025 Facilities Master Plan EIS will be held on January 17, 2013 from 7:00 to 9:00 p.m. at the HHS/CDC Edward R. Roybal Campus, Thomas R. Harkin Global Communications Center (Building 19), located at 1600 Clifton Road N.E., Atlanta, GA 30333, Auditorium A.

The CDC invites you to attend the public scoping meeting in order to learn more about the proposed 2015-2025 Facilities Master Plan EIS and provide input on any issues of potential concern related to the Master Plan and EIS. The scoping meeting will be conducted as an open house, where visitors may come, receive information and give comments.

If you cannot attend the public scoping meeting, we encourage you to provide written comments on the scope of the 2015-2025 Facilities Master Plan EIS and areas of potential concern. A copy of the Notice of Intent is enclosed to provide you with more information on the proposed action and the scoping process. Written comments must be received on or before February 1, 2013. You may submit comments, identified by Docket No. CDC-2012-0013, by any of the following methods:

- Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Mail: George F. Chandler, Senior Advisor, Centers for Disease Control and Prevention, 1600 Clifton Road, N.E., Mailstop A-22, Atlanta, Georgia 30333

Instructions: All submissions received must include the agency name and Docket Number. All relevant comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided. For access to the docket to read background documents or comments received, go to <http://www.regulations.gov>.

Please be advised that the meeting is being held in a Federal government building; therefore, Federal security measures are applicable. In planning your arrival time, please take into account the need to park and clear security. All visitors must enter the Roybal Campus through the entrance on Clifton Road; the guard force will



Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30333

direct visitors to the designated parking area. Visitors must present government issued photo identification (e.g., a valid Federal identification badge, state driver's license, state non-driver's identification card, or passport). Non-United States citizens must present a valid passport, visa, Permanent Resident Card, or other type of work authorization document. All persons entering the building must pass through a metal detector. Visitors will be issued a visitor's ID badge at the entrance to Building 19 and will be escorted in groups of 5–10 persons to the meeting room. All items brought to HHS/CDC are subject to inspection.

For further information, please contact George F. Chandler at (404)639-5153. Thank you for your participation.

Sincerely,
George F. Chandler
Senior Advisor
Centers for Disease Control and Prevention

**Scoping Meeting Distribution List
Centers for Disease Control and Prevention
2015-2025 Facilities Master Plan EIS for CDC's Edward R. Roybal Campus**

Mr. Rob Holland
Chief-Public Affairs
US Army Corps of Engineers - South Atlantic
Division
Room 9M15, 60 Forsyth Street SW
Atlanta, Georgia 30303

Ms. Doralyn Kirkland
Planning and Policy Advisor
Georgia Department of Natural Resources,
Environmental Protection Division
2 Martin Luther King Jr. Drive, Suite 1152, East
Tower
Atlanta, Georgia 30334

Ms. Lyn Menne
Community and Economic Development
Director
City of Decatur Downtown Development
Authority
Decatur City Hall, 509 McDonough Street
Atlanta, Georgia 30030

Mr. Larry Lincoln, Director
US Environmental Protection Agency - Region 4
Office of External Affairs
61 Forsyth Street SW
Atlanta, Georgia 30303

Ms. Rachel Brown
District Engineer
Georgia DOT, District 7
5025 New Peachtree Road
Atlanta, Georgia 30341

Ms. Regina Brewer
Historic Preservation Planner
City of Decatur Historic Preservation
Decatur City Hall, 509 McDonough Street
Atlanta, Georgia 30030

Mr. Luis J. Santiago
Special Agent-in-Charge
US Fish and Wildlife Service
1875 Century Boulevard, Suite 380
Atlanta, Georgia 30345

Ms. Jannine Miller
Executive Director
Georgia Regional Transportation Authority
245 Peachtree Center Avenue NE, Suite 800
Atlanta, Georgia 30303

Mr. Gary Cornell
Interim Director
DeKalb County Planning and Sustainability
330 West Ponce de Leon Avenue
Atlanta, Georgia 30030

Major Phillip May
Regional Administrator
Federal Emergency Management Agency
3003 Chamblee Tucker Road
Atlanta, Georgia 30341

Dr. David Crass
Division Director
Georgia Department of Natural Resources-
Historic Preservation Division
254 Washington Street SW, Ground Level
Atlanta, Georgia 30334

Mr. Ernest Gilchrist
DeKalb County Development Authority
330 West Ponce de Leon Avenue, 6th Floor
Atlanta, Georgia 30030

Mr. Gordon Wissinger
Acting Regional Director
National Park Service
100 Alabama Street SW, 1924 Building
Atlanta, Georgia 30303

Mr. Charley English
Director
Georgia Emergency Management Agency
P.O. Box 18055
Atlanta, Georgia 30316

Mr. Burell Ellis
DeKalb CEO
330 W. Ponce de Leon Avenue, 6th Floor
Atlanta, Georgia 30030

**Scoping Meeting Distribution List
Centers for Disease Control and Prevention
2015-2025 Facilities Master Plan EIS for CDC's Edward R. Roybal Campus**

Ms. Joyce Stanley
Regional Environmental Protection Assistant
US Department of Interior Office of
Environmental Policy and Compliance Atlanta
Region
Suite 1144, 75 Spring Street SW
Atlanta, Georgia 30303

Mr. Joshua Mello
Assistant Director Transportation Planning
City of Atlanta - Transportation Planning
55 Trinity Avenue, Suite 3350
Atlanta, Georgia 30303

Ms. Patrece Keeter
DeKalb County
Department of Public Works, Transportation
Division
1950 West Exchange Place, Fourth Floor
Tuckery, Georgia 30084

Mr. Jess Weaver
Regional Executive - Southeast Area
US Geological Survey
3039 Amwiler Road NW
Atlanta, Georgia 30360

Mr. Richard Mendoza
Commissioner
City of Atlanta Department of Public Works
55 Trinity Avenue SW, Suite 4700
Atlanta, Georgia 30303

Mr. Ted Rhinehart
Director of Public Works
DeKalb County Public Works Department
330 West Ponce de Leon Avenue, 4th Floor
Decatur, Georgia 30030

Mr. Arnold Cole
Special Agent in Charge
US Department of Homeland Security
SAC Atlanta, 1100 Centre Parkway
Atlanta, Georgia 30344

Ms. Charlotta Wilson Jacks
Director
City of Atlanta Office of Planning
55 Trinity Avenue, Suite 3350
Atlanta, Georgia 30303

Mr. Randy Beck
Director
Fulton County Planning and Community
Services
5440 Fulton Industrial Boulevard
Decatur, Georgia 30336

Mr. David J. Brown
Executive Vice President and Chief Preservation
Officer
National Trust for Historic Preservation
1758 Massachusetts Avenue NW
Washington D.C. 20036

Ms. Jane Rawlings
NPU-F Chair
City of Atlanta, NPU-F
2116 Lenox Road
Atlanta, Georgia 30324

Ms. Vicki D. Coleman
Director
City of Chamblee Development Department
5468 Peachtree Road
Chamblee, Georgia 30341

Mr. Ed Pfister
US Department of Health and Human
Services/Office of Facilities Management and
Policy
61 Forsyth Street SW
Atlanta, Georgia 30303

Mr. Keith Parker
General Manager
MARTA
2424 Piedmont Rd NE
Atlanta, Georgia 30324

**Scoping Meeting Distribution List
Centers for Disease Control and Prevention
2015-2025 Facilities Master Plan EIS for CDC's Edward R. Roybal Campus**

Ms. Kate Ryan
Director of Preservation
Georgia Trust for Historic Preservation
Rhodes Hall, 1516 Peachtree Street NW
Atlanta, Georgia 30309

Ms. Amanda Thompson
Planning Director
City of Decatur Planning Commission
Decatur City Hall, 509 McDonough Street
Atlanta, Georgia 30030

Mr. James Wagner, President
Emory University
201 Dowman Drive
Atlanta, Georgia 30322

Mr. Darryl Bonner
Retail Leasing
Emory Point
1627 Clifton Road
Atlanta, Georgia 30329

Ms. Betty Willis
Executive Director
Clifton Community Partnership
1599 Clifton Road NE, 5th Floor
Atlanta, Georgia 30322

Mr. Vincent J. Dollard
Associate VP Communications
Emory University Hospital
1364 Clifton Road
Atlanta, Georgia 30322

The University Inn
1767 North Decatur Road
Atlanta, Georgia 30307

Mr. John O'Callaghan
President
Atlanta Neighborhood Development
Partnership
235 Peachtree Street NE, Suite 2000
Atlanta, Georgia 30303

Ms. Linda Matzigkeit
Chief Administrative Officer
Children's Healthcare of Atlanta at Egleston
1405 Clifton Road
Atlanta, Georgia 30322

Toco Properties
1800 Briarcliff Road NE
Atlanta, Georgia 30329

Mr. Jeff DuFresne
Executive Director
Urban Land Institute Atlanta District Council
300 Galleria Parkway, Suite 100
Atlanta, Georgia 30339

Public Affairs Officer
Marcus Autism Center
201 Dowman Drive
Atlanta, Georgia 30322

Ms. Kim Israel
Membership Director
Druid Hills Golf Club
740 Clifton Road
Atlanta, Georgia 30307

Mr. Jim Stokes
Executive Director
Livable Communities Coalition
10 Peachtree Place, Suite 610
Atlanta, Georgia 30309

Mr. Don Mueller
Executive Director
Marcus Autism Center
1920 Briarcliff Road
Atlanta, Georgia 30329

Ms. Katie Kisner
CSX Railroad
500 Water Street
Jacksonville, Florida 32202

**Scoping Meeting Distribution List
Centers for Disease Control and Prevention
2015-2025 Facilities Master Plan EIS for CDC's Edward R. Roybal Campus**

Mr. Charlie Stokes
CDC Foundation
55 Park Place NE, Suite 400
Atlanta, Georgia 30303

Mr. Nate Comstock
Manager of Clinical Operations
Emory Orthopedics and Spine Center
59 Executive Park South
Atlanta, Georgia 30322

Ms. Mindee Adamson
Principal
Druid Hills High School
1798 Haygood Drive
Atlanta, Georgia 30307

Mr. Bruce MacGregor
President
Druid Hills Civic Association
P.O. Box 363
Decatur, Georgia 30031

Wesley Woods Health Center
1817 Clifton Road NE
Atlanta, Georgia 30329

Ms. Betty Willis
President
Clifton Corridor Transportation Management
Association
1945 Starvine Way
Decatur, Georgia 30033

Ms. Cheryl Iverson
VP - Marketing
DeKalb Medical Center
2701 North Decatur Road
Decatur, Georgia 30033

Mr. Leonardo McClarty
President
DeKalb Chamber of Commerce
Two Decatur Town Center, 125 Clairemont
Avenue, Suite 235
Decatur, Georgia 30030

Ms. Kathryn Johnson
General Manager
Emory Conference Center Hotel/Emory Inn
1615 Clifton Road
Atlanta, Georgia 30329

Mr. Sam Williams
President
Metro Atlanta Chamber of Commerce
2345 Andrew Young International Boulevard
Atlanta, Georgia 30303

Chief William O'Brien
DeKalb County Police
1960 West Exchange Place
Tucker, Georgia 30084

AT+T, Local Communications
575 Morosgo Dr NE Rm 14f67
Atlanta, Georgia 30324-3300

Verizon, Long Haul Communications
6 Concourse Parkway Ne
Atlanta, Georgia 30328

Harwood Condominium Association
755-A Houston Mill Road
Atlanta, Georgia 30329

Ms. Barbara Sanders
Clerk and CEO
DeKalb County Board of Commissioners
1300 Commerce Drive
Decatur, Georgia 30030

Commissioner Jeff Rader
DeKalb County Commissioner, District 2
Manuel J. Maloof Center, 1300 Commerce
Drive, 5th Floor
Decatur, Georgia 30030

Mr. Tom Woodward
Lindbergh La Vista Corridor Coalition
1403 LaVista Road NE
Atlanta, Georgia 30324

**Scoping Meeting Distribution List
Centers for Disease Control and Prevention
2015-2025 Facilities Master Plan EIS for CDC's Edward R. Roybal Campus**

Senator Jason Carter
Georgia District 42
P.O. Box 573
Decatur, Georgia 30031

Sheriff Thomas Brown
DeKalb County Sheriff
4415 Memorial Drive
Decatur, Georgia 30032

Congressman John Lewis
US House Representative, District 5
The Equitable Building, 100 Peachtree Street
NW, #1920
Atlanta, Georgia 30303

Chief Mike Booker
Decatur Police Department
420 W. Trinity Place
Decatur, Georgia 30030

Mr. Jack White
President
Virginia Highlands Civic Association
P.O. Box 8041 Station F
Atlanta, Georgia 31106

Senator Saxby Chambliss
US Senate
100 Galleria Parkway
Atlanta, Georgia 30339

Chief Toni Washington
Decatur Fire Department
PO Box 220
Decatur, Georgia 30031

Mr. Chuck Williams
President
Briarcliff Woods Civic Association
P.O. Box 98358
Atlanta, Georgia 30359

Senator Johnny Isakson
US Senate
3625 Cumberland Blvd
Atlanta, Georgia 30339

Chief Toni Washington
Decatur Fire Department
PO Box 220
Decatur, Georgia 30031

Congressman Hank Johnson
US House Representative, District 4
5700 Hillondale Drive
Lithonia, Georgia 30058

Mr. Joe Basista
Director
DeKalb County Department of Watershed
Management
1580 Roadhaven Drive
Stone Mountain, Georgia 30083

Mayor Kasim Reed
City of Atlanta
55 Trinity Avenue, Suite 2500
Atlanta, Georgia 30303

Mr. Craig Barrs
EVP External Affairs
Georgia Power - Electric
241 Ralph McGill Boulevard
Atlanta, Georgia 30308

Mayor Bill Floyd
City of Decatur
P.O. Box 220
Decatur, Georgia 30031

Mr. Jim Kibler
VP External Affairs and Public Policy
Atlanta Gas Light- Gas
10 Peachtree Place
Atlanta, Georgia 30309

**Scoping Meeting Distribution List
Centers for Disease Control and Prevention
2015-2025 Facilities Master Plan EIS for CDC's Edward R. Roybal Campus**

Scoping Letters were emailed to:

Ms. Martha Pacini
Communications Representative
Victoria Estates Civic Association

Ms. Suzan Rowe
President
Clairemount Heights Civic Association

Mr. John Bugge
President
Mason Mill Civic Association

Zonolite Road Business District
info@zonoliteroad.com

Mr. Brian Bilski
Woodland Hills

Ms. Mary Leight
Acting President
Briarwood Hills Civic Association

Mr. Todd Hill
Chair
Alliance to Improve Emory Village

Scoping Summary Appendix D
Scoping Meeting Display Boards and Materials

Welcome to the Public Scoping Meeting

2015-2025 Facilities Master Plan EIS
for the Centers for Disease Control
and Prevention's (CDC)
Edward R. Roybal Campus

January 17, 2013



Purpose and Need for Project

The CDC is planning to prepare a new Roybal Campus Facilities Master Plan for 2015-2025.

The previous 2000-2009 Master Plan has been successfully implemented. The new Master Plan is needed in order for CDC to be able to respond quickly to new or increased mission requirements through additional campus construction or reconfiguration to meet new public health challenges at home and abroad.

Objectives

- Prepare a new Master Plan for 2015 through 2025 to build upon the completed 2000 to 2009 plan
- Support CDC's mission and strategic vision
- Accommodate the agency's ever changing mission requirements
- Provide a comprehensive roadmap for physical development—not a funding mechanism
- Discover opportunities and constraints to develop a balanced carrying capacity
- Explore a range of alternatives to ensure the highest and best use of land, facility and financial resources



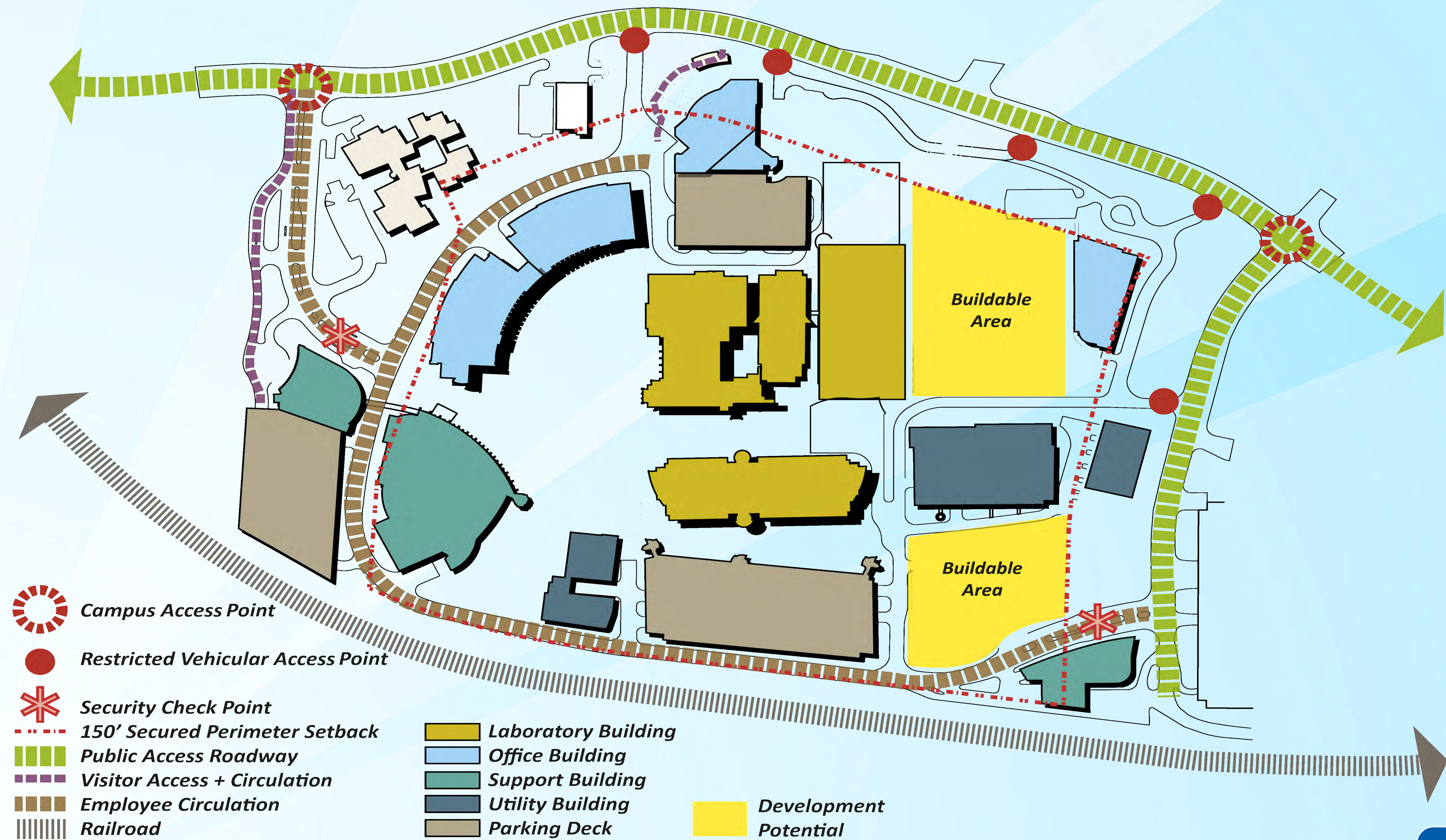
Existing Conditions



- 46.7 acre campus
- Approximately 5,000 employees
- 19 existing buildings, 3.3 million GSF of laboratory, office and support space
- 3,300 parking spaces

Aerial image courtesy Google Earth.

Existing Conditions



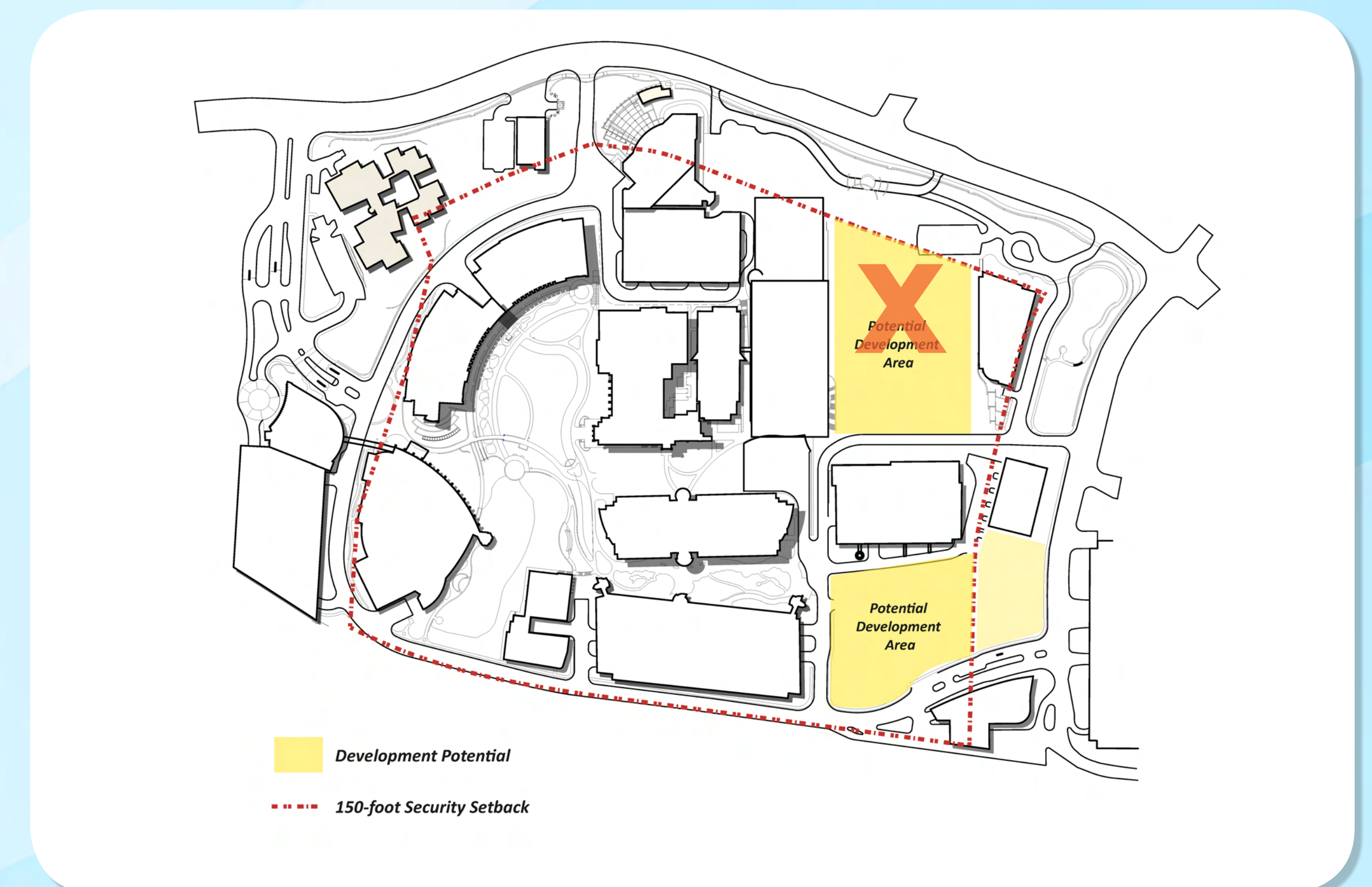
Master Plan Conceptual Alternatives

1. No Action; Status Quo

- Retain 1996 parking cap of 3,300
- Maintain current intensity of uses
- 1% annual campus growth

2. Increase Existing Space Efficiency

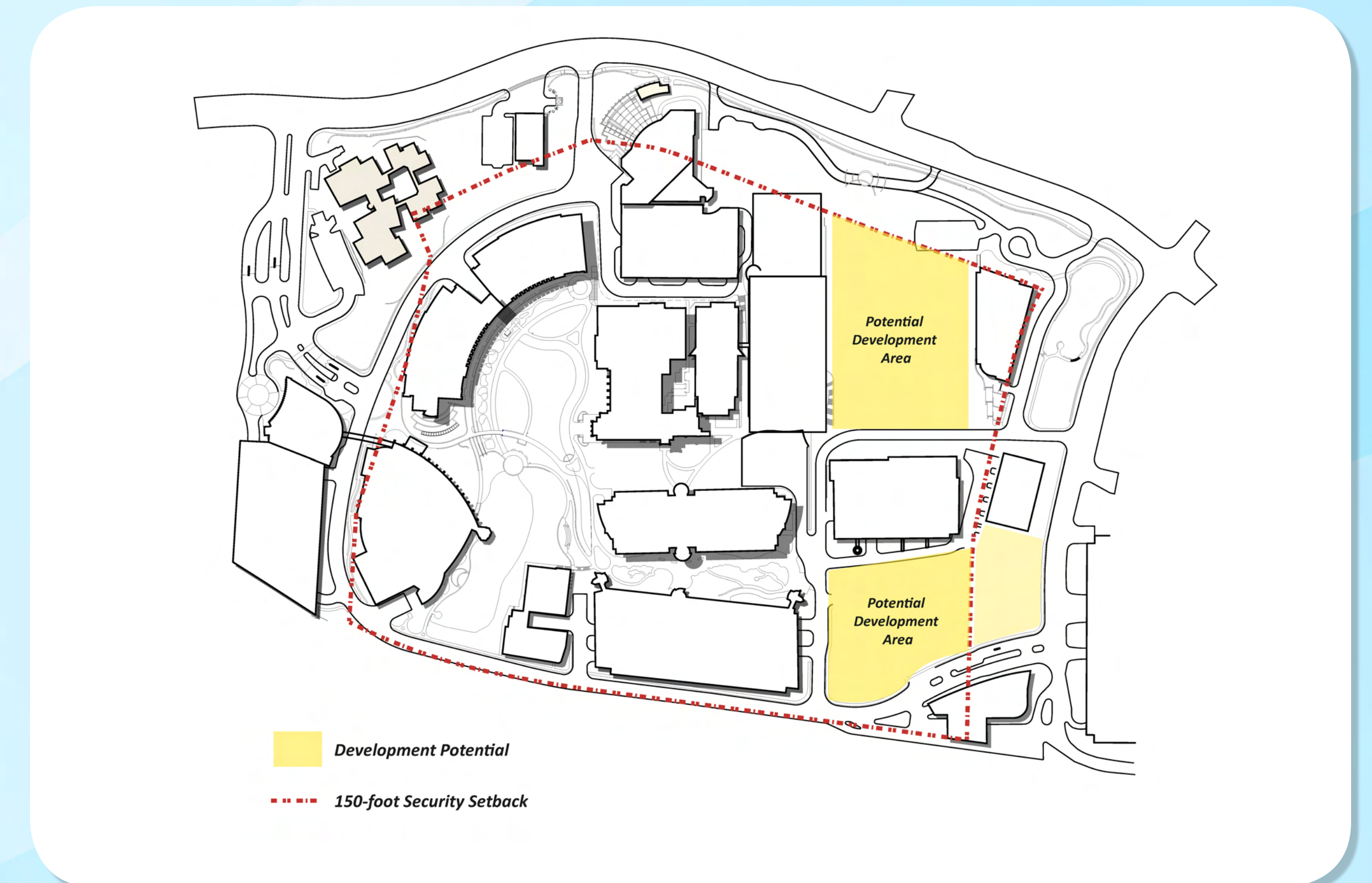
- Maximize existing office efficiency
- Aggressively promote Alternative Workplace Solutions (AWS) to add more persons to Campus without major new office or lab construction
- Construct new parking to accommodate AWS growth (size TBD)



Master Plan Conceptual Alternatives

3. Laboratory and Office Mix

- Office buildings (size TBD)
- Laboratory buildings (size TBD)
- Parking (size TBD)
- Sub-alternatives:
 - Two office buildings + one lab + parking deck
 - Two labs + one office building + parking deck



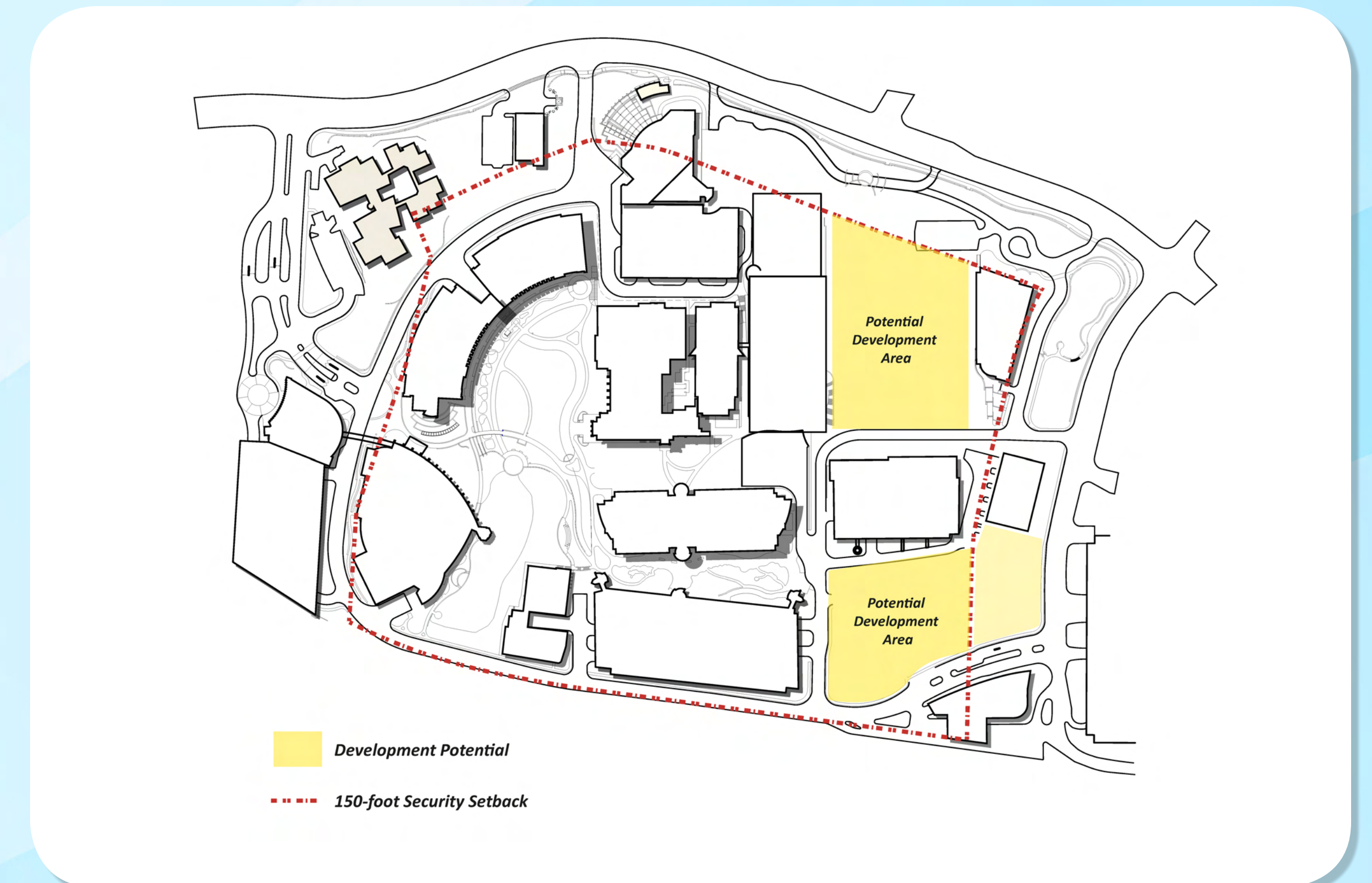
Master Plan Conceptual Alternatives

4. Office Program Focus

- Office construction only (Size TBD)
- No additional laboratory buildings
- New parking (TBD)

5. Laboratory Program Focus

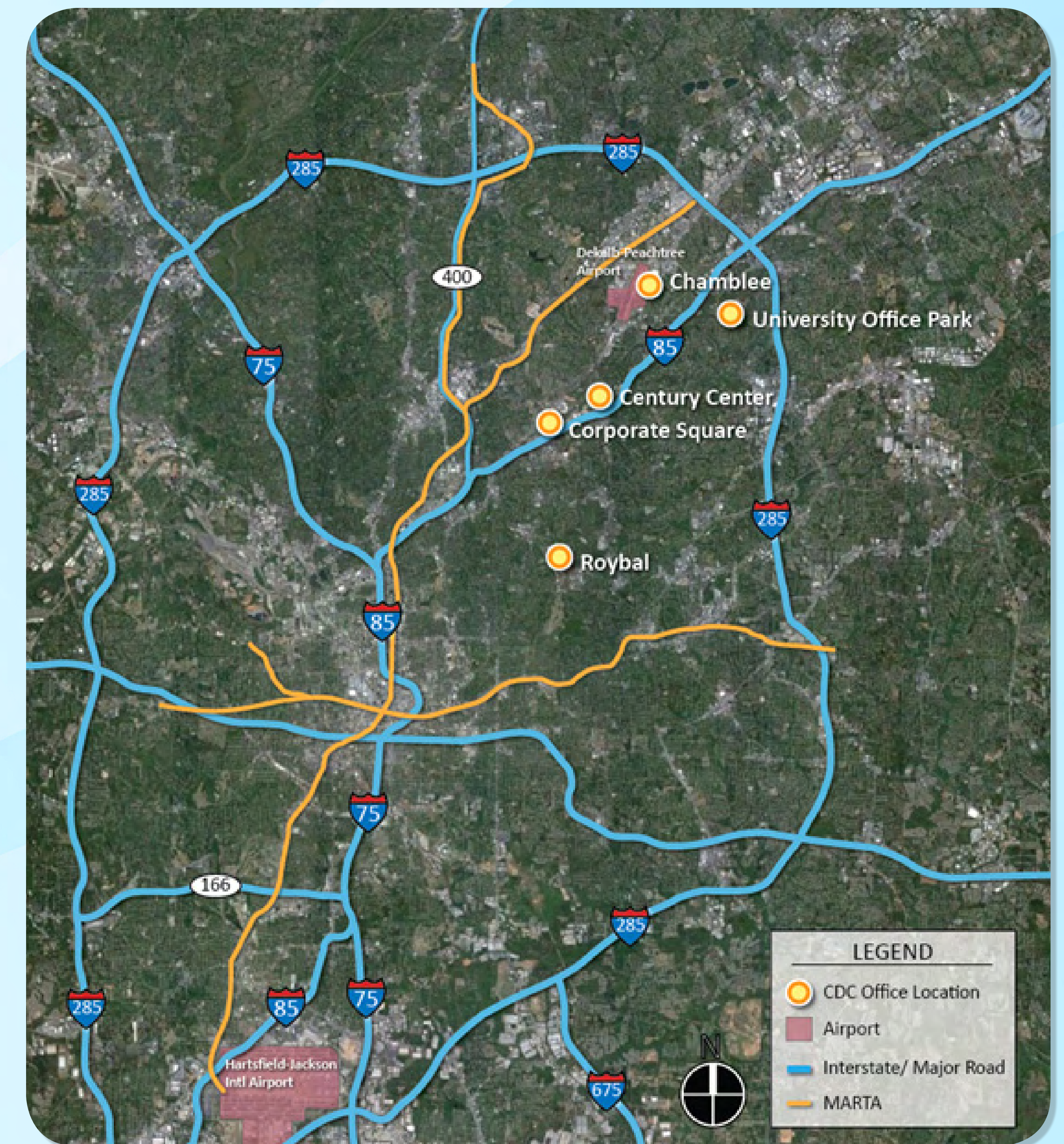
- Laboratory construction only (size TBD)
- No additional office buildings
- New parking (TBD)



Master Plan Conceptual Alternatives

6. Relocation Alternatives

- Organizational relocation options
- Interface with Atlanta Housing Strategy

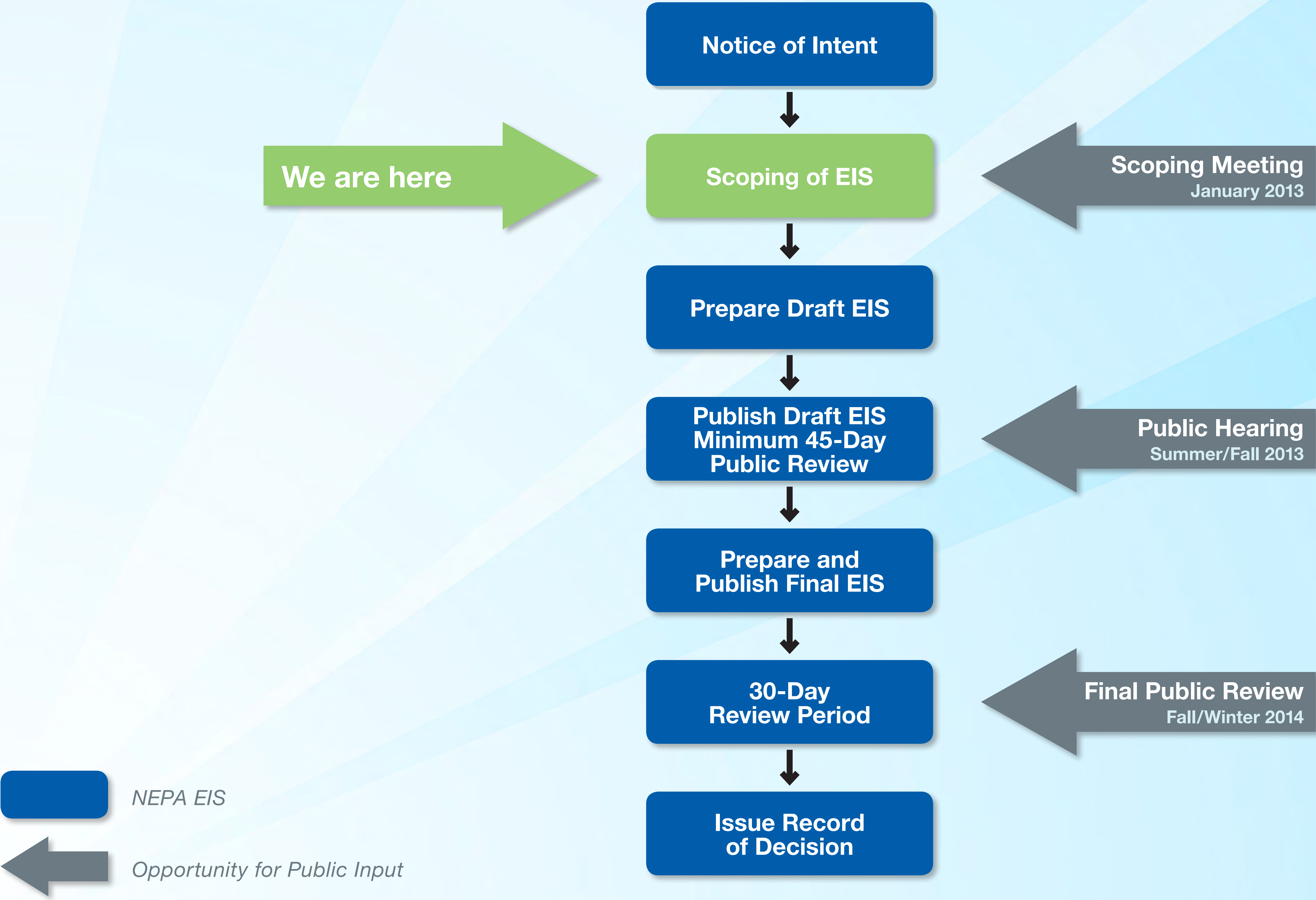


EIS – What is NEPA?

The National Environmental Policy Act of 1969 (NEPA) establishes national policy for the protection of the environment. NEPA provides for consideration of environmental issues in federal agency planning and decision-making.

- Requires Federal agencies to take environmental factors into consideration when making significant decisions (large-scale Campus Development Plans, for example)
- Public disclosure of potential significant impacts to the natural and built environments from Federal activities
- Actively solicits public participation

EIS–What is NEPA?



EIS Key Concerns

Growth in Study Area

Transportation

- Traffic
- Pedestrian Circulation
- Safety
- Transit
- Parking

Air Quality

Infrastructure

- Power
- Water

Waste Stream Management

Cumulative Impacts

Community Impacts

Resources to be Examined in the EIS to Date

Natural Environment

- Air Quality
- Noise
- Geology, Topography, and Soils
- Water Resources
- Vegetation and Wildlife

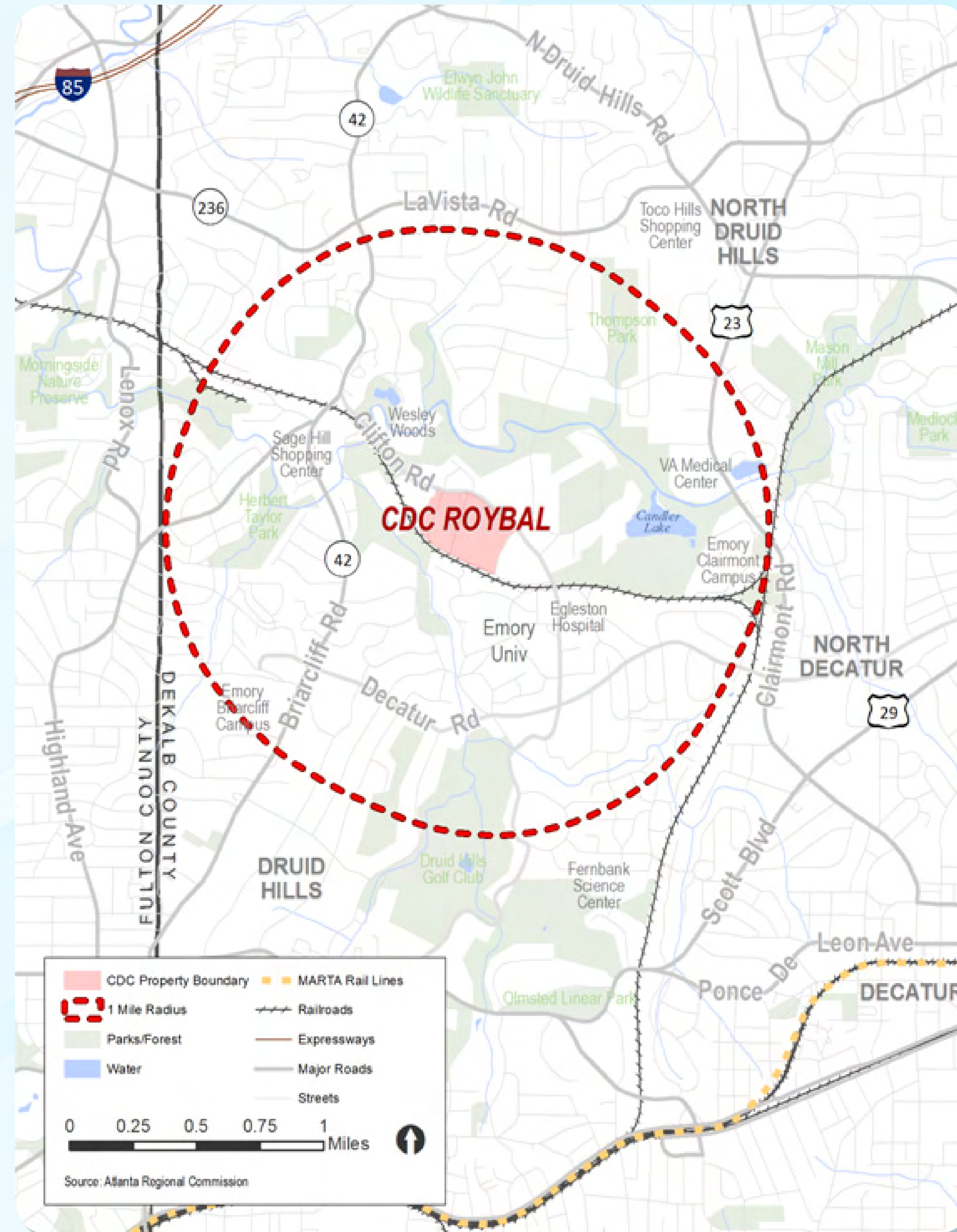
Infrastructure

- Traffic, Parking and Transit
- Pedestrian Circulation
- Utilities

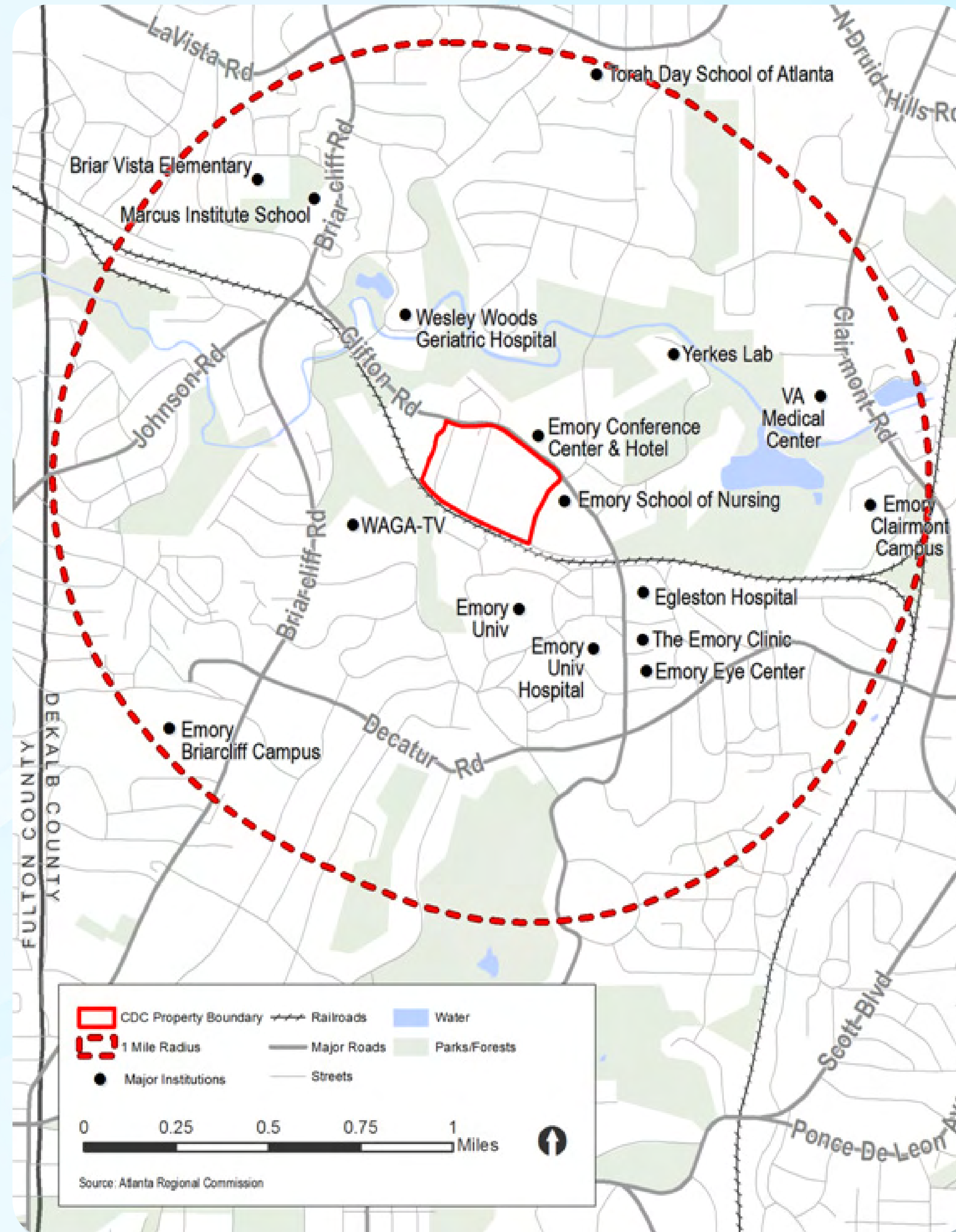
Built Environment

- Land Use and Zoning
- Public Policy
- Population/Demographics
- Economic Conditions
- Community Facilities and Services
- Cultural Resources

EIS Study Area



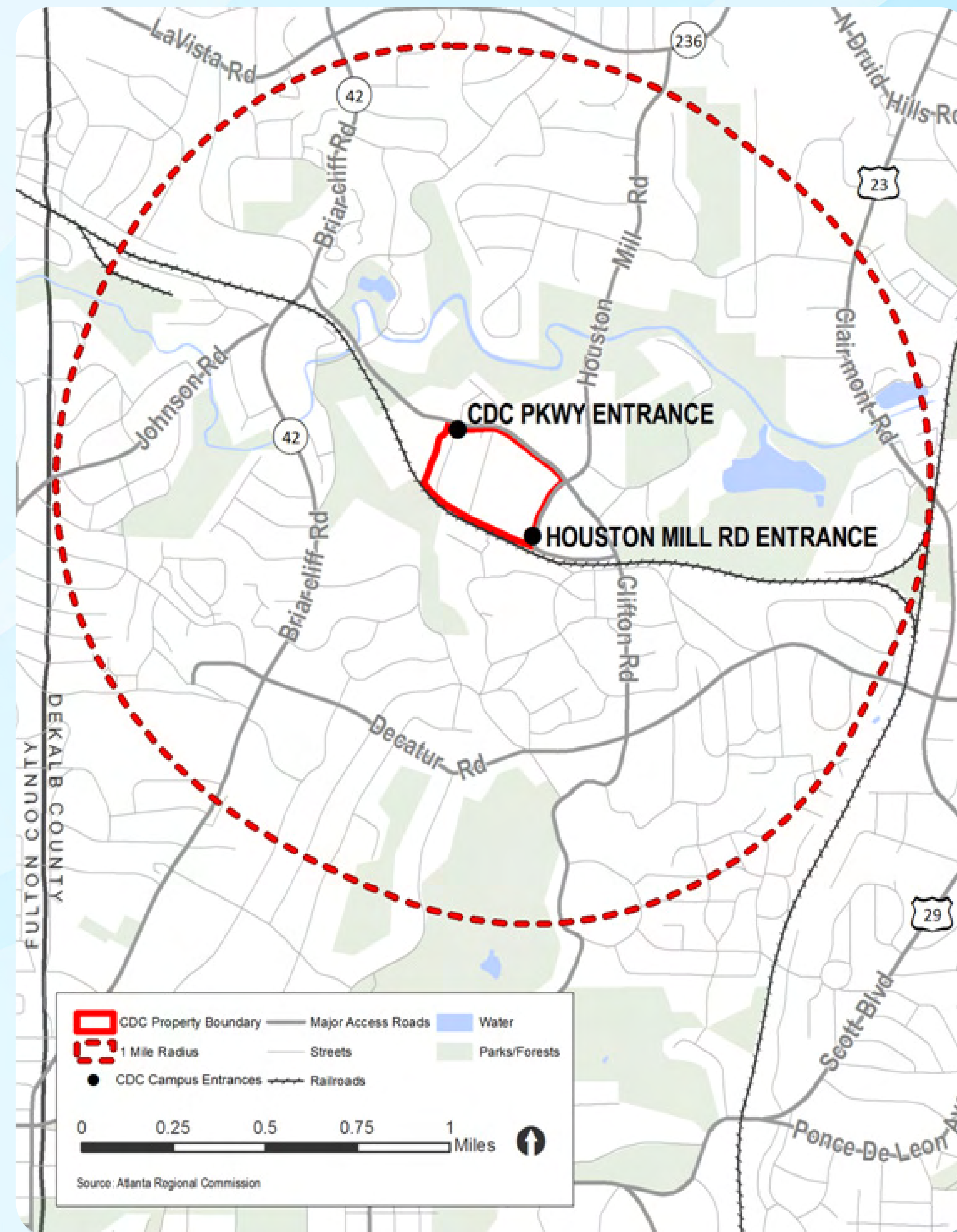
Growth in the Study Area



Transportation

- Traffic
- Parking
- Pedestrian Circulation
- Transit
- Safety

A detailed Traffic Study will be completed for the EIS.



Scoping Comments

**Written comments
identified by Docket
No. CDC-2012-0013
can be submitted by
any of the following
methods on or before
February 1, 2013:**

- Federal eRulemaking Portal:
<http://www.regulations.gov>.
Follow the instructions for submitting comments.
- Mail: George F. Chandler, Senior Advisor,
Centers for Disease Control and Prevention,
1600 Clifton Road, N.E., Mailstop A-22
Atlanta, Georgia 30333
- Instructions: All submissions received must
include the agency name and Docket Number.
All relevant comments received will be posted
without change to <http://www.regulations.gov>
including any personal information provided.
For access to the docket to read background
documents or comments received, go to
<http://www.regulations.gov>

Notice of Intent Publications

Federal Register

December 17, 2012

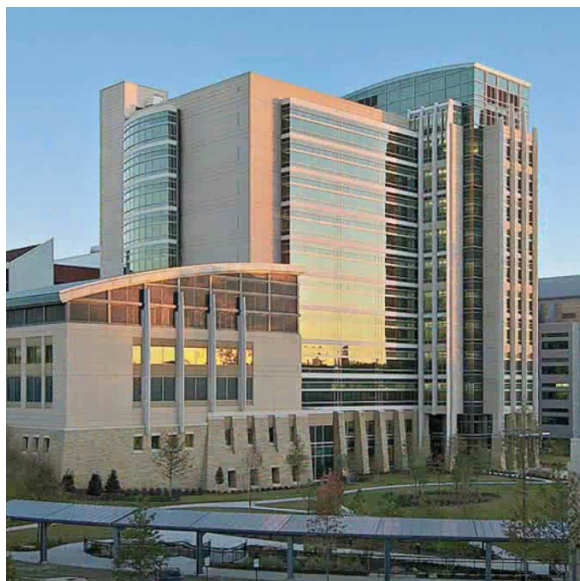
Atlanta Journal Constitution

December 20, 2012 — January 14, 2013

The Patch

January 14, 2013 — January 17, 2013





NEPA

NEPA establishes national policy for the protection of the environment. Under NEPA, Federal agencies are required to evaluate the environmental effects of their proposed actions and a range of feasible alternatives to the proposed action, prior to making a decision. NEPA requires Federal agencies to prepare an EIS for actions that could significantly affect the quality of the human environment.

Public Involvement Process and EIS Milestones

Scoping Meeting	January 17, 2013
End of Scoping Meeting Comment Period	February 1, 2013
Public Review of Draft EIS	Summer/Fall 2013
Public Hearing	TBD
Public Review of Final EIS	Fall/Winter 2014
Record of Decision (ROD)	Winter 2014

Scoping Comments

Written comments identified by Docket No. CDC-2012-0013 can be submitted by any of the following methods on or before February 1, 2013:

Federal eRulemaking Portal

<http://www.regulations.gov>

Follow the instructions for submitting comments.

Mail

George F. Chandler, Senior Advisor
Centers for Disease Control and Prevention,
1600 Clifton Road, N.E.,
Mailstop A-22,
Atlanta, Georgia 30333

Instructions

All submissions received must include the agency name and Docket Number. All relevant comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided. For access to the docket to read background documents or comments received, go to <http://www.regulations.gov>.

For Further Information Contact

George F. Chandler, Senior Advisor
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., Mailstop A-22
Atlanta, Georgia 30333
Telephone (404) 639-5153

2015-2025 Facilities Master Plan
Environmental Impact Statement (EIS) for the
Centers for Disease Control and Prevention's (CDC)
Edward R. Roybal Campus
Atlanta, Georgia

Public Scoping Meeting Brochure

JANUARY 17, 2013



Purpose of Scoping

In accordance with the National Environmental Policy Act (NEPA), CDC is conducting public scoping to identify the range of major issues to be addressed relative to the proposed 2015-2025 Facilities Master Plan for CDC's Edward R. Roybal Campus. Scoping is an early and open process for determining the scope of issues to be addressed in the Environmental Impact Statement (EIS). The scoping meeting is a critical element of the scoping process. It allows the public to learn more about the proposed action, provide comments and identify potential issues to be addressed in EIS.



Proposed Action

CDC is preparing a new 2015-2025 Facilities Master Plan for the Edward R. Roybal Campus. The new Master Plan will cover a 10-year planning period and will examine potential growth in Agency Mission, laboratory and laboratory support space, office space and personnel on the Roybal Campus.

The Master Plan will also examine alternative ways of accommodating potential mission change or growth at the Roybal Campus, including new construction of laboratory and office buildings, as well as maximizing the efficiency and utilization of existing space to accommodate potential growth. The Master Plan will evaluate opportunities for future development of the site, taking into consideration constraints and carrying capacity of both the Roybal Campus proper and the surrounding community.

Background

CDC is dedicated to protecting health and promoting quality of life through the prevention and control of disease, injury and disability. CDC, headquartered on Clifton Road in Atlanta, Georgia since 1958, is recognized as the lead Federal agency for protecting the health and safety of people, providing credible information to enhance health decisions, and promoting health through strong partnerships. CDC serves as the national focus for developing and applying disease prevention and control, environmental health, and health promotion and education activities designed to improve the health of the people of the United States.

The previous 2000-2009 Master Plan has been successfully implemented. The new Master Plan is needed in order for CDC to be able to respond quickly to new or increased mission requirements through additional campus construction or reconfiguration in order to meet new public health challenges at home and abroad.

Project Objectives

- Prepare a new Master Plan for 2015 through 2025 to build upon the completed 2000 to 2009 plan;
- Support CDC's mission and strategic vision;
- Accommodate the agency's ever changing mission requirements;
- Provide comprehensive roadmap for physical development, not a funding mechanism;
- Discover opportunities, constraints and balanced carrying capacity; and,
- Explore a range of alternatives to ensure the highest and best use of land, facility and financial resources.



Conceptual Alternatives

CDC will be considering a wide range of conceptual alternatives in the Master Plan, including the following:

- 1 No action/status quo
- 2 Increase existing space efficiency
- 3 Laboratory and office mix
- 4 Office program focus
- 5 Laboratory program focus
- 6 Relocation alternatives

The EIS will provide considerable detail for each conceptual alternative as it is developed and scoping comments are taken into account, and will analyze the impacts of the alternatives under consideration on the natural and built environment.

Potential Areas of EIS Analysis

Potential impact areas to be evaluated in the EIS are as follows:

- Traffic, Parking and Pedestrian Circulation
- Land Use, Zoning and Public Policy
- Cultural Resources
- Social and Economic Impacts
- Water Resources
- Community Facilities and Services
- Noise
- Air Quality
- Utilities
- Geology, Topography and Soils
- Vegetation and Wildlife
- Cumulative Impacts

Public Scoping Meeting Comment Form

2015-2025 Facilities Master Plan EIS
for the Centers for Disease Control and Prevention's (CDC)
Edward R. Roybal Campus

Comments

Contact Information

Name: _____

Address: _____

Affiliation: _____

Phone: _____

E-mail: _____

Please leave your comment form with us this evening, or written comments can be submitted on or before February 1, 2013. You may submit comments, identified by Docket No. CDC-2012-0013, by any of the following methods:

Mail

George F. Chandler, Senior Advisor
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., Mailstop A-22
Atlanta, Georgia 30333

Federal eRulemaking Portal

<http://www.regulations.gov>

Follow the instructions for submitting comments.

Instructions

All submissions received must include the agency name and Docket Number (CDC-2012-0013). All relevant comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided. For access to the docket to read background documents or comments received, go to <http://www.regulations.gov>.

For Further Information Contact

George F. Chandler, Senior Advisor
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., Mailstop A-22
Atlanta, Georgia 30333
Telephone (404) 639-5153



Scoping Summary Appendix E

Written Comments



EMORY
UNIVERSITY

Campus Services

Matthew Early, PE
Vice President

January 31, 2013

George F. Chandler
Senior Advisor
Department of Health and Human Services
Centers for Disease Control and Prevention
1600 Clifton Road, N.E. Mailstop A-22
Atlanta, GA 30333

Agency: HHS/CDC
Reference: Docket No. CDC-2012-0013

Dear Mr. Chandler:

Thank you for inviting Emory's feedback on the proposed 2015-2025 Facilities Master Plan for the CDC's Roybal campus. In reviewing the plans, our top concerns are traffic and visual barriers when looking across our campus to the CDC area.

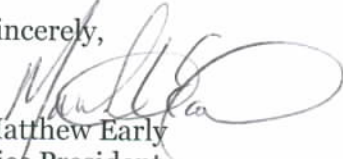
Based on the six concept alternatives, the proposed construction of new facilities at the CDC Roybal Campus would increase employee population. This increase would drastically increase the annual average daily traffic (AADT) on Clifton Road and in the Clifton Corridor in general. This increase in AADT will further degrade the condition of the roads and increase congestion in surrounding neighborhoods that are already at capacity or failing. We request that no additional parking be made available on the Roybal Campus.

As part of the Environmental Impact Statement, we request that a traffic impact study be conducted to determine how the fulfillment of the master plan would affect traffic in the Clifton Corridor. If the results of that study suggest the impact is substantial, we ask the CDC to support the initiation of projects to relieve main arteries.

Secondly, we request that you consider the visual impact on our campus of any new building constructed on the Roybal Campus. Paying attention to our site boundaries and building placement will make a significant difference to your Emory neighbors.

We look forward to hearing your response to these issues. Thank you.

Sincerely,



Matthew Early
Vice President
Campus Services

cc: Michael J. Mandl, Executive Vice President, Finance and Administration, Emory University

Emory University
100 Water Tower Place
Atlanta, Georgia 30322
An equal opportunity, affirmative action university



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION

MARK WILLIAMS
COMMISSIONER

DR. DAVID CRASS
DIVISION DIRECTOR

SJC
REC. 23 Jan 2013

January 17, 2013

George F. Chandler
Senior Advisor
Centers for Disease Control and Prevention
1600 Clifton Road, NE, Mailstop A-22
Atlanta, Georgia 30333

**RE: EIS for Proposed 2015-2025 Facilities Master Plan, Edward R. Roybal Campus, Clifton Road, Atlanta
DeKalb County, Georgia
FP-130102-001**

Dear Mr. Chandler:

The Historic Preservation Division (HPD) has received initial information concerning the above referenced project. Our comments are offered to assist the US Department of Health and Human Services' Centers for Disease Control and Prevention in complying with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA).

Thank you for contacting HPD concerning this potential federal undertaking and initiating the Section 106 consultation process. We look forward to receiving Section 106 compliance documentation from you when it becomes available. Please note that if the federal agency involved intends to use National Environmental Policy Act (NEPA) documentation and procedures to comply with Section 106 of the NHPA in lieu of the procedures set forth in 36 CFR Part 800.3 through 800.6, the federal agency must notify HPD and the Advisory Council on Historic Preservation (ACHP) in advance, pursuant to 36 CFR Part 800.8(c).

For information pertaining to historic properties in the subject areas of potential effect (APE) for the completion of Section 106 or NEPA documentation, please see our website under "Historic Resources" for information concerning the multiple file sources available for research in our office. Unfortunately, we cannot provide this service for you.

If we may be of further assistance, please do not hesitate to contact me at (404) 651-6624 or Elizabeth.shirk@dnr.state.ga.us.

Sincerely,

Elizabeth Shirk

Elizabeth Shirk
Environmental Review Coordinator

From: Wright, Steven [mailto:steven_m_wright@nps.gov]

Sent: Tuesday, January 29, 2013 9:45 AM

To: Chandler, George (CDC/OCOO/BFO)

Subject: ER-12-0893 - Notice of Intent (NOI) to prepare an Environmental Impact Statement, Public Scoping Meeting, and Request for Comments; 2015-2025 Facilities Master Plan for Edward R. Roybal Campus in Atlanta, GA; Docket Number CDC-2012-0013

OFFICIAL CORRESPONDENCE VIA ELECTRONIC MAIL
NO HARD COPY TO FOLLOW

United States Department of the Interior

NATIONAL PARK SERVICE

Southeast Regional Office

Atlanta Federal Center

1924 Building

100 Alabama St., S. W.

Atlanta, Georgia 30303

IN REPLY REFER TO:

(ER-12/0893)

George F. Chandler, Senior Advisor
Centers for Disease Control and Prevention
1600 Clifton Road NE.
Mailstop A-22
Atlanta, Georgia 30333

Dear Mr. Chandler:

The National Park Service (NPS) has reviewed the Notice of Intent (NOI) to prepare an Environmental Impact Statement, Public Scoping Meeting, and Request for Comments; 2015-2025 Facilities Master Plan for Edward R. Roybal Campus in Atlanta, GA.

Based on the information provided in the December 17, 2012, NOI, the NPS has no comments at this time.

Please contact me at 404-507-5710 if you have any further questions.

Sincerely,

//signed//

Steven M. Wright
Planning and Compliance Division
Southeast Region



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

37C
NCC
12 FEB 2013

January 31, 2013

George F. Chandler
Senior Advisor
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., Mailstop A-22
Atlanta, Georgia 30333

Subject: EPA Scoping Comments on the Environmental Impact Statement for the Proposed 2015-2025 Facilities Master Plan for the Center for Disease Control and Prevention's (CDC) Edward R. Roybal Campus Atlanta, Georgia.

Dear Mr. Chandler:

Pursuant to Section 309 of the Clean Air Act,) and Section 102(2)(c) of the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency has reviewed the subject document and participated in the public scoping meeting on January 17, 2012. The Centers for Disease Control and Prevention (CDC) is preparing a Facilities Master Plan for the Edward R. Roybal Campus that covers a 10-year planning period from 2015 to 2025. The proposed Master plan will examines potential growth and development needs associated with the Agency Mission, laboratory and laboratory support space, office space and personnel. The Master Plan will evaluate alternative means of accommodating growth including maximizing the efficient use of the existing space within the Campus.

The proposed Master Plan will build upon a previously completed 2000-2009 Master plan for the Campus. During the previous plan period, the Campus and the surrounding communities underwent substantial growth and development and the new Master Plan will help to provide comprehensive roadmap for physical development and identify potential opportunities and constraints for future growth and land-use within the surrounding area.

The following are EPA's comments and recommendations on the proposed Master Plat that should be considered in the Master Plan and design, construction and maintenance of the Campus.

Alternatives

The proposed project examines a range of conceptual alternatives as a means of identifying the best-use of land, facility space and financial resources. The alternatives include a no-action and five action alternatives. The proposed action alternatives include increasing existing space efficiency, examining laboratory and office mixes, and focusing on an office program, a laboratory program and relocation alternatives.

Recommendation: EPA supports alternatives that focus on increasing the efficient use of existing space and natural resources, with consideration given to the agency mission and staff productivity/wellbeing, and community impacts. Increasing existing space efficiency could also be considered in combination with other action alternatives. The proposed EIS should discuss CDC's mission requirements and ongoing and future needs in an effort to ascertain the best-use of land or facility space. Opportunities to integrate additional green space into the Master Plan should also be examined. Any alternatives that are eliminated from further consideration should be discussed and reasons for their dismissal should be provided.

Water Resources

Aquatic Resources: The CDC Edward Roybal Campus is located within a priority watershed (Upper Chattahoochee). South Fork Peachtree Creek is an impaired surface water feature that is also located within the project boundary.

Recommendations: EPA has attached a Water Quality Assessment Report for South Fork Peachtree Creek with the associated cause of impairment and total maximum daily load (TMDL) status for consideration in the planning process. Best management practices for stormwater runoff should be implemented and adhered to during and after construction of any new facilities on-site to prevent increased water volume and sediment load to area waterbodies. Typical BMPs include the use of staked hay bales, silt fences, sediment ponds, mulching and reseeded, and appropriate buffer zones along water bodies. The document should include an erosion control plan or reference Georgia's Erosion and Sediment Control Planning Manual and CDC's commitment to compliance. Compliance may include National Pollutant Discharge Elimination System (NPDES) permit coverage for the construction activity, compliance with the Storm Water Management Program and proper and maintenance of BMPs. BMPs for the design operational life of the facility should also be considered. In addition, EPA encourages CDC to avoid development within any flood zone areas including the 100-year and 500-year floodplains. While flood zone areas are within the vicinity of the project boundary, they appear to be located outside the Roybal Campus.

Green Infrastructure and Pollution Prevention

Opportunities for Incorporation and Use of Green Infrastructure Concepts: Green building practices should be considered that provide an opportunity to create environmentally-sound and resource-efficient buildings by using an integrated approach

to design. Green buildings promote resource conservation, including energy efficiency, renewable energy, and water conservation features. It also takes into consideration environmental impacts and waste minimization; reduces operational and maintenance costs; and addresses issues such as transportation and other community infrastructure systems. Given the historic drought levels and the national energy issues, resource conservation measures that minimize impacts from major federal facilities are important.

Recommendation: The proposed project should include resource conservation and pollution prevention measures that will be incorporated in the project design, and operation of CDC. Over the life of the facilities reduced operating costs and competitive first costs can be expected, while protecting the environment. Specific recommendations are listed below.

- Use of natural ventilation and lighting in the design of the facility can result in energy conservation and cost savings. Using efficient lighting can attain savings in electricity. For example, compact fluorescent lamps consume much less electricity, have a longer life, reduce air pollution, and produce long-term cost savings in comparison to incandescent bulbs. Efficient lighting is now available for almost any application and most provide the same amount of light as older systems, with less glare, noise, better color, and no flickering.
- Installation of energy efficient windows and doors (for example, low emissivity or reflective glass) also conserve energy. Consider using passive solar cooling and/or heating where practicable. For example, "pre-cooling" a building at night when outside temperatures are lower reduces demand for air conditioning during the day when electricity rates are higher.
- Providing adequate shading of glassed areas by trees or building overhangs also helps save energy. Strategically placed trees provide shade around buildings, thereby reducing energy requirements. In addition, trees also fix atmospheric carbon dioxide, the greenhouse gas of most concern. They also serve as a buffer between different land-uses.
- Low-flow toilets and shower heads should be installed in new facilities, promoting water conservation and cost savings. Landscaping should be designed to minimize water use. Use of greywater for irrigation purposes should be considered.
- Existing and any proposed changes to the waste management strategies for the facility should also be discussed. For example, is the waste going to be managed on-site or will an existing landfill / incinerator be used? EPA recommends examining wastes produced by the Campus and proposed facilities to determine ways to prevent, reduce, and recycle that waste. In addition, procurement of recycled goods is necessary to stimulate markets and complete the recycling "loop". If CDC is not already doing so, EPA encourages CDC, consider a waste recycling program and as a consumer and purchaser of goods and services, to

make purchasing decisions with this in mind. Specifications for the use of recycled goods may be incorporated into contracts for goods and services. Yard waste composting should also be taken into consideration. By decreasing the amount of solid waste sent to landfills, a composting operation can reduce disposal costs. At the same time, it results in the production of a beneficial soil conditioner which can be used for landscape maintenance to enhance growth of plants.

In addition to the recommendations above, we are providing a list of website resources below and a list of Agency subject matter contacts upon request.

Website Resources

US Green Building Council <http://www.usgbc.org/DisplayPage.aspx?CategoryID=19>

US EPA www.epa.gov/opptintr/greenbuilding

Environmental Design and Construction www.edcmag.com

Air Quality

The document should assess existing air quality conditions in terms of the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. EPA has set National Ambient Air Quality Standards for six principal "criteria" pollutants. These pollutants are particle pollution (often referred to as particulate matter), ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, and lead. Based on our review, the project is located in an area which is currently designated as marginal for Ozone and in attainment/unclassifiable for particulate matter.

Recommendations: EPA recommends that the project contractors implement overall diesel emission reduction activities through various measures such as: switching to cleaner fuels, retrofitting equipment with emission reduction technologies, repowering older engines with newer cleaner engines, replacing older vehicles, and reducing idling on-site through operator training and/or contracting policies. EPA can assist in the future development or implementation of these options. In addition, EPA encourages CDC to work with Emory and surrounding neighbors to address transportation options to reduce vehicular congestion (i.e., improved bus and light rail services).

Noise

Noise impacts should be predicted for the no build and the build alternatives. The NEPA evaluation should also estimate any projected incremental increases of noise. Generally, EPA considers all increases over 10 dBA at any given noise level as a significant increase. Typical noise levels produced by construction equipment within 50 feet, which are available in the literature, should be disclosed. The distance to the closest residence/receptors and the project construction time (months, years) along with project construction periods for major components of the project should also be estimated in order to help assess the magnitude of the construction noise impact. This information will allow potentially affected residents, employees and businesses to approximate the

duration and degree of noise disturbance during construction. The use of a hush houses or similar equipment should be considered around any stationary equipment to shield noise at its source, and all motorized equipment should be properly tuned to the manufacturer's specifications for additional source reduction. Construction equipment should be equipped with noise attenuation devices, such as mufflers and insulated engine housings, wherever possible. Noise abatement should be considered when noise impacts from construction approaches the Noise Abatement Criteria or if they meet or exceed the existing noise levels by 10 dBA (especially if the existing noise levels are 50 dBA and above).

Environmental Justice and Children's Health

Pursuant to the executive order 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (February 11, 1994) and its accompanying memorandum, the EIS should examine the effects of implementing the proposed alternatives within the Master Plan on minority and/or low-income populations. In addition, the EIS should consider children's health issues pursuant to the executive order 13045: Protection of Children from Environmental Health Risks and Safety Risks.

Recommendations: The EIS should identify, analyze and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations. Similarly, children's health issues should be considered. The EIS should include a demographics analysis of the affected project area. Some of this information can be found at the U.S. Census Bureau. EPA has attached an American Community Survey Report for the project area that includes information on the project area. Publically available EPA Web-based tools like EJView: <http://epamap14.epa.gov/ejmap/entry.html> and NEPAAssist: <http://nepassisttool.epa.gov> can currently be used to conduct preliminary screening level reviews. This information should be used in conjunction with information acquired during the public involvement and ground verification processes. The public involvement process should continue to provide opportunities for communities to help identify potential effects, and minimization and mitigation measures. A summary of the communities' comments and the agencies response to those comments should be included in the EIS. EPA notes that effort to improve access to public meetings, official documents, and notices to affected communities are being made. Efforts to minimize and mitigate adverse impacts should be outlined or analyzed in EISs, whenever feasible, should address significant and adverse environmental effects of proposed federal actions on minority and /or low income communities and children.

Archeological and Historical Sites

The EIS should identify potential archeological sites and historic properties within the project area. Based on a preliminary screen of the nearby area, at least three historic sites districts (i.e., Emory University District, Emory Grove Historic District and University Park /Highlands/Emory Estates Historic District are located within a mile of proposed project site. If the project has the potential to impact these resources, the EIS should document that proper coordination with the State Historic Preservation Office (SHPO)

and/Tribal Historic Preservation Officer has occurred. Compliance with Section 106 of the National Historic Preservation Act should be discussed within the NEPA process. The EIS should discuss any avoidance or minimization measures and procedures for events such as unearthing archaeological sites during prospective construction. Such procedures should include work cessation in the area until the SHPO and/ the Tribes approve of continued construction.

Cumulative and Indirect Impact

The NEPA document should define and estimate the indirect and cumulative impacts associated with the proposed project. Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems (40 CFR § 1508.8). Cumulative impact is the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of the entity that undertakes the action. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time. (40 CFR § 1508.7)

Thank you for the opportunity to comment on this project. If you have any questions or require technical assistance, please contact Ntale Kajumba of my staff at (404) 562-9615.

Sincerely,



Heinz J. Mueller, Chief
NEPA Program Office
Office of Environmental Accountability

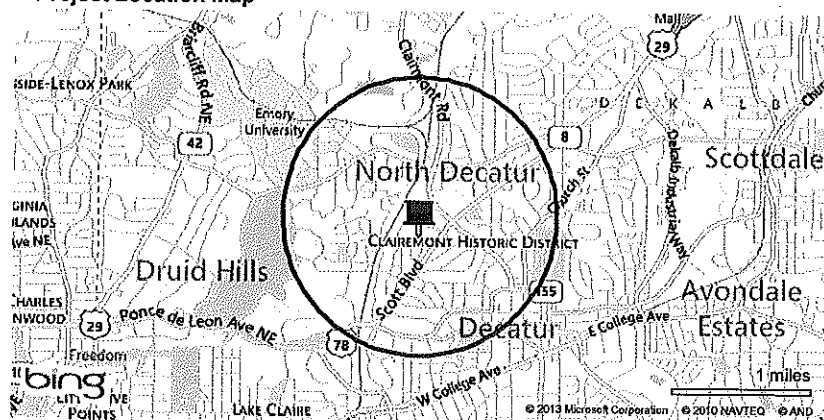
Attachments: Maps and Reports


<http://nepassisttool.epa.gov/NEPAVEtoolsPublic/report/analysis.aspx>

NEPAssist Report

1600 Clifton Rd NE, Atlanta, GA 30329

Project Location Map



Geographic coordinates:

POINT (33.799524,-84.325014) with buffer 1 mile

Note: The information in the following reports is based on publicly available databases and web services. The National Report uses nationally available datasets and the State Reports use datasets available through the [EPA Regions](#). Click on the hyperlinked question to view the data source and associated metadata.

National Report

Project Location	33.799524,-84.325014
Within 1 mile of an Ozone 8 - hr Non-Attainment Area?	yes
Within 1 mile of a PM2.5 Non-Attainment Area?	no
Within 1 mile of a Lead Non-Attainment Area?	no
Within 1 mile of a Federal Land?	no
Within 1 mile of an impaired stream?	yes
Within 1 mile of an impaired waterbody?	no
Within 1 mile of a waterbody?	yes
Within 1 mile of a stream?	yes
Within 1 mile of an NWI wetland?	click here
	May take several minutes
Within 1 mile of a Toxic Substances Control Act (TSCA) site?	no
Within 1 mile of a RADInfo site?	no
Within 1 mile of a Brownfields site?	no
Within 1 mile of a Superfund site?	no
Within 1 mile of a Toxic Release Inventory (TRI) site?	no
Within 1 mile of a water discharger (NPDES)?	no
Within 1 mile of an air emission facility?	yes
Within 1 mile of a hazardous waste (RCRA) facility?	yes
Within 1 mile of a school?	yes
Within 1 mile of an airport?	no
Within 1 mile of a hospital?	yes
Within 1 mile of a designated sole source aquifer?	no
Within 1 mile of a historic property on the National Register of Historic Places?	yes

Georgia Report

EJView Reports

Last updated on Thursday, January 31, 2013

http://ofmpub.epa.gov/tmdl_waters10/attains_waterbody.control?p_list_id=GAR031300011207&p_cycle=&p_report_type=T



Watershed Assessment, Tracking & Environmental Results

Last updated on Thursday, January 31, 2013

You are here: [EPA Home](#) [Water](#) [WATERS](#) [Water Quality Assessment and TMDL Information](#)
Waterbody Quality Assessment Report

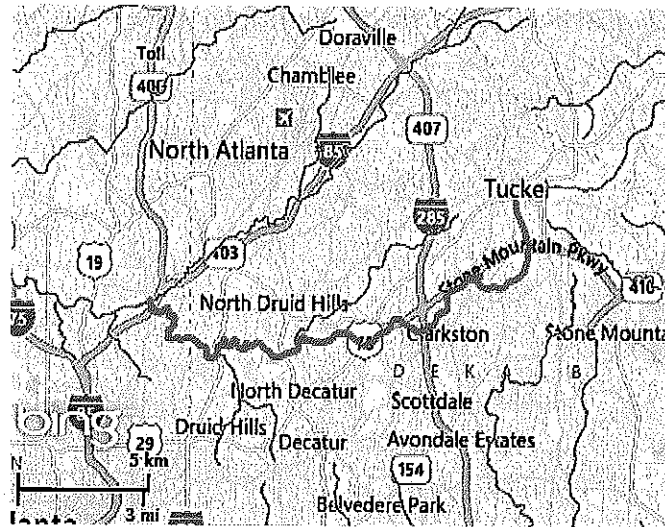
[Return to home page](#)

On This Page

- [Causes of Impairment](#)
- [TMDLs That Apply to This Waterbody](#)
- [Previous Causes of Impairment Now Attaining All Uses](#)

State: [Georgia](#)
Waterbody ID:
 GAR031300011207
Location: Headwaters
 To Peachtree Creek,
 Atlanta
State Waterbody
Type: River
EPA Waterbody
Type: Rivers and
 Streams
Water Size: 15
Units: miles
Watershed Name:
[Upper Chattahoochee](#)

2010 Waterbody Report for South Fork Peachtree Creek



Click on the waterbody for an interactive map

Features

- [About This Database \(Integrated Report\)](#)
- [Assessing Water Quality \(Questions and Answers\)](#)
- [Integrated Reporting Guidance](#)
- [Previous National Water Quality Reports](#)
- [EnviroMapper for Waters](#)
- [AskWATERS](#)
- [EPA WATERS Homepage](#)
- [Exchange Network](#)
- [Assessment Databases](#)
- [Statewide Statistical Surveys](#)
- [How's My Waterway Search tool](#)
- [Pollution Categories Summary Document](#)

[Waterbody History Report](#)

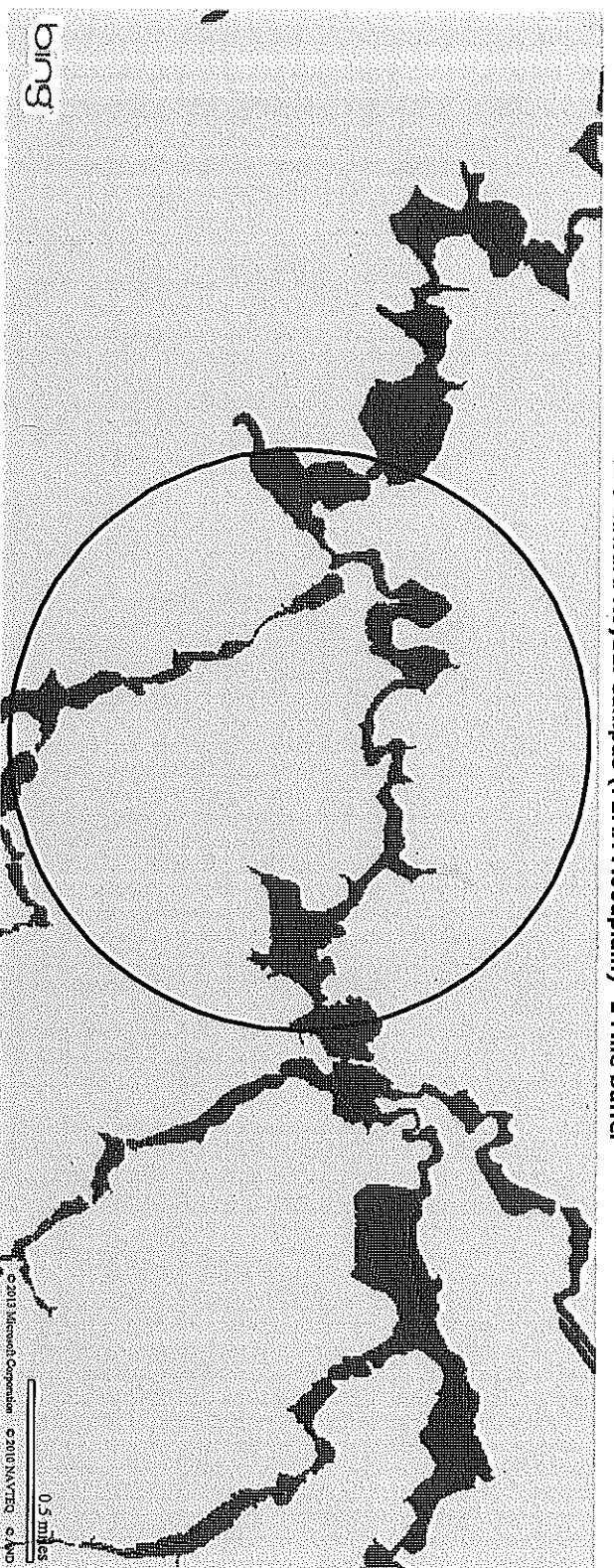
Data are also available for these years: [2008](#) [2006](#) [2004](#) [2002](#) [2000](#)

Causes of Impairment for Reporting Year 2010

Description of this table

<u>Cause of Impairment</u>	<u>Cause of Impairment Group</u>	<u>State TMDL Development Status</u>
Benthic Macroinvertebrates Bioassessments	Cause Unknown - Impaired Biota	TMDL needed
Fecal Coliform	Pathogens	TMDL completed
Fish Bioassessments	Cause Unknown - Impaired Biota	TMDL needed

CDC Edward Roybal Campus (FEMA Floodplain) -1 Mile Buffer

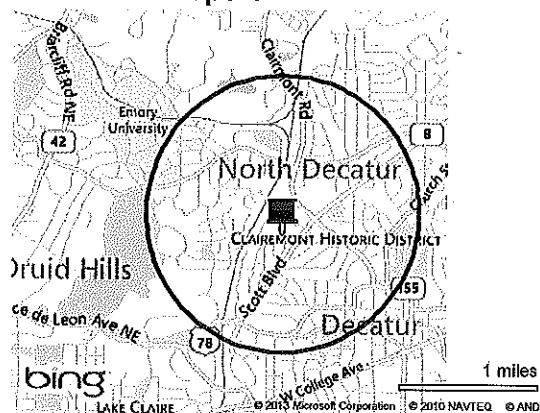


All A and V Zones
Shaded X- Zone
Zone D



http://nepassisttool.epa.gov/NEPAVEtoolsPublic/report/Drill_local.aspx?

NEPAssist Report



Report question: *Within 1 mile of a historic property on the National Register of Historic Places?* yes

Modify question by entering a new buffer distance and unit for the selected study area:

1 miles

Features within Study Area

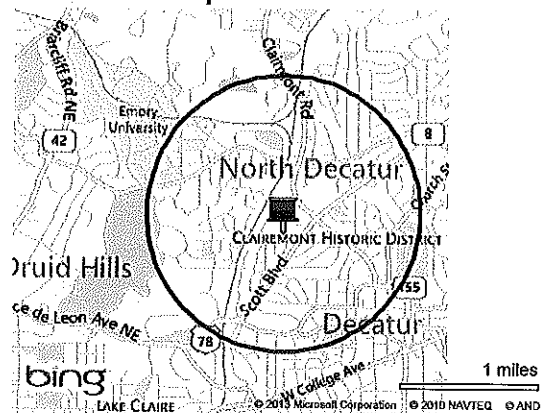
Features found: 3

Name	Distance	Units
Emory University District	.64	miles
Emory Grove Historic District	.68	miles
University Park--Emory Highlands--Emory Estates Historic District	.83	miles

Last updated on Thursday, January 31, 2013

<http://nepassisttool.epa.gov/NEPAVEtoolsPublic/report/Drill.aspx?>

NEPAssist Report



Last updated on Thursday, January 31, 2013

Report question: *Within 1 mile of a National, State, or Local forest or park?* yes

Modify question by entering a new buffer distance and unit for the selected study area:

1 miles

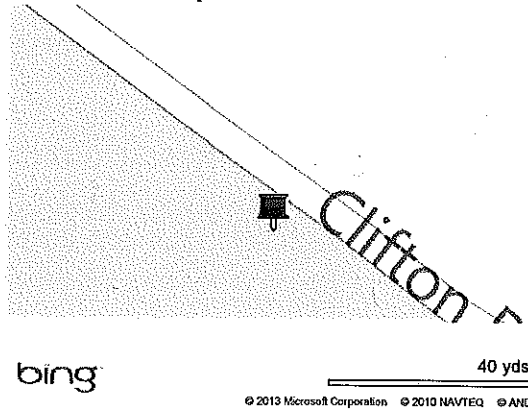
Features within Study Area

Features found: 3

Name	Distance	Units
WD Thompson Park	.66	miles
Johnson Park	.78	miles
Adams Park	.87	miles

http://nepassisttool.epa.gov/NEPAVEtoolsPublic/report/Drill_local.aspx?

NEPAssist Report

Report question: *Within 1 mile of a hospital?* yes

Modify question by entering a new buffer distance and unit for the selected study area:

1

meters



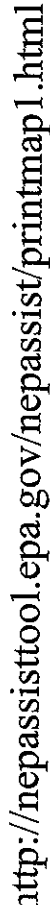
Submit Query

Features within Study Area

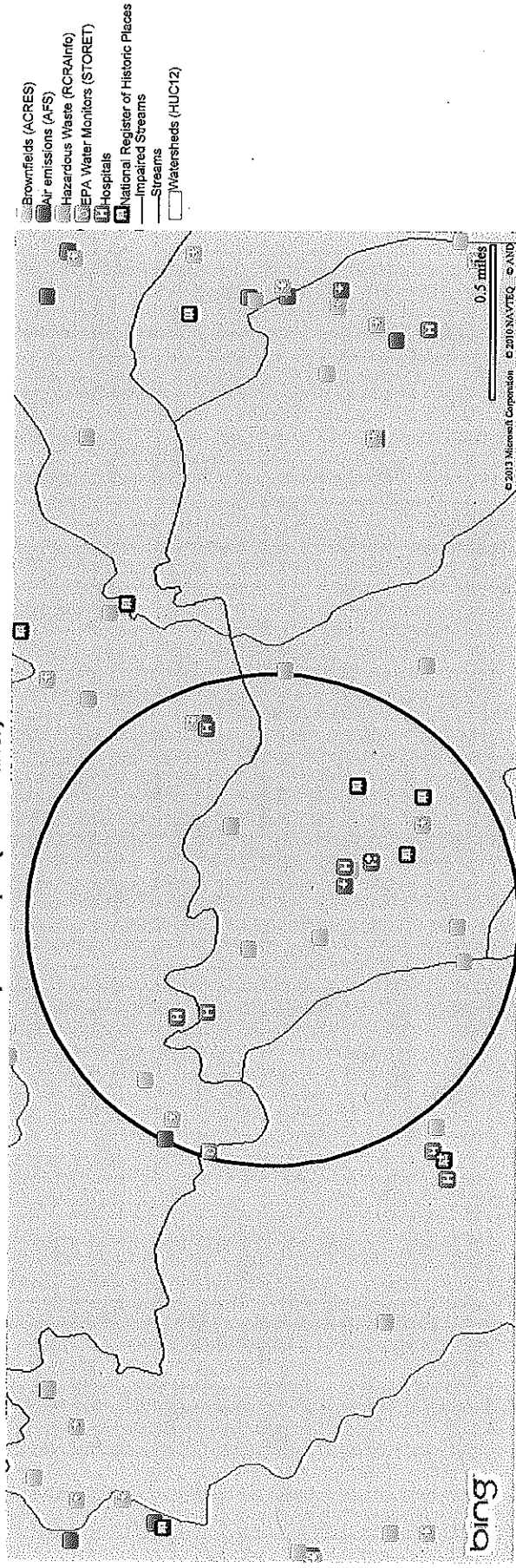
Features found: 8

Name	Distance	Units
Center for Rehabilitation Medicine	.41	mile
Wesley Woods Intermediate Care Facility	.42	mile
Children's Healthcare of Atlanta at Egleston	.47	mile
Wesley Woods Geriatric Hospital	.51	mile
Aidmore Hospital	.52	mile
Ronald McDonald Childhood Cancer Clinic	.53	mile
Emory University Hospital	.53	mile
Veterans Hospital	.84	mile

Last updated on Thursday, January 31, 2013



CDC Stoyball Campus (1 Mile Buffer)





EJView ACS Summary Report



Location: -84.325014,33.799524

Study Area: 1 mile around the point location

	2006 - 2010 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	5,319	100%	302
Less than 9th Grade	99	2%	143
9th - 12th Grade, No Diploma	161	3%	158
High School Graduate	352	7%	138
Some College, No Degree	661	12%	168
Associate Degree	170	3%	148
Bachelor's Degree or more	4,046	76%	284
POPULATION AGE 5+ YEARS BY ABILITY TO SPEAK ENGLISH			
Total	10,500	100%	853
Speak only English	7,886	75%	709
Non-English at Home ¹⁺²⁺³⁺⁴	2,615	25%	445
¹ Speak English "very well"	1,823	17%	345
² Speak English "well"	620	6%	202
³ Speak English "not well"	153	1%	180
⁴ Speak English "not at all"	20	0%	140
³⁺⁴ Speak English "less than well"	173	2%	182
²⁺³⁺⁴ Speak English "less than very well"	792	8%	238
POPULATION AGE 5+ YEARS BY LANGUAGE SPOKEN AT HOME			
Total	N/A	N/A	N/A
Speak only English	N/A	N/A	N/A
Non-English Speaking	N/A	N/A	N/A
Population by Place of Birth for the Foreign-Born			
Total	N/A	N/A	N/A
Europe	N/A	N/A	N/A
Asia	N/A	N/A	N/A
Africa	N/A	N/A	N/A
Oceania	N/A	N/A	N/A
Americas	N/A	N/A	N/A
Households by Household Income in 1999			
Household Income Base	3,129	100%	139
< \$15,000	434	14%	162
\$15,000 - \$25,000	275	9%	140
\$25,000 - \$50,000	515	16%	147
\$50,000 - \$75,000	502	16%	133
\$75,000 +	1,403	45%	186
Occupied Housing Units by Tenure			
Total	3,129	100%	139
Owner Occupied	1,545	49%	128
Renter Occupied	1,584	51%	142

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available.

2006-2010 ACS 5-year Estimates: The American Community Survey (ACS) summary files provide nation-wide population and housing characteristic data at all Census summary levels down to the Block Group level. This data was collected between January 1, 2006 and December 31, 2010. ACS replaces the decennial census sample data, and is not the 2010 Census population counts data. (<http://www.census.gov/acs/www/#fragment-3>)

Margin of error (MOE): The MOE provides a measure of the uncertainty in the estimate due to sampling error in the ACS survey. Applying the MOE value yields the confidence interval for the estimate. For example, an estimate value of 50 and +/- MOE of 5 means the true value is between 45 and 55 with a 90 percent certainty (http://www.census.gov/acs/www/Downloads/data_documentation/Accuracy/MultiyearACSAccuracyofData2010.pdf). Maximum MOE is shown for each value within study area.

Source: U.S. Census Bureau, American Community Survey (ACS) 2006 - 2010.



EJView Census 2010 Summary Report



Location: -84.325014,33.799524

Study Area: 1 mile around the point location

Summary		Census 2010
Population		11,072
Population Density (per sq. mile)		3,976
Minority Population		3,130
% Minority		28%
Households		3,485
Housing Units		3,806
Land Area (m ²)		7,212,932
% Land Area		98%
Water Area (m ²)		120,491
% Water Area		2%

Population by Race	Number	Percent
Total	11,072	-----
Population Reporting One Race	10,800	98%
White	8,201	74%
Black	946	9%
American Indian	20	0%
Asian	1,533	14%
Pacific Islander	5	0%
Some Other Race	95	1%
Population Reporting Two or More Races	272	2%
Total Hispanic Population	381	3%
Total Non-Hispanic Population	10,691	97%
White Alone	7,942	72%
Black Alone	924	8%
American Indian Alone	14	0%
Non-Hispanic Asian Alone	1,529	14%
Pacific Islander Alone	5	0%
Other Race Alone	28	0%
Two or More Races Alone	249	2%

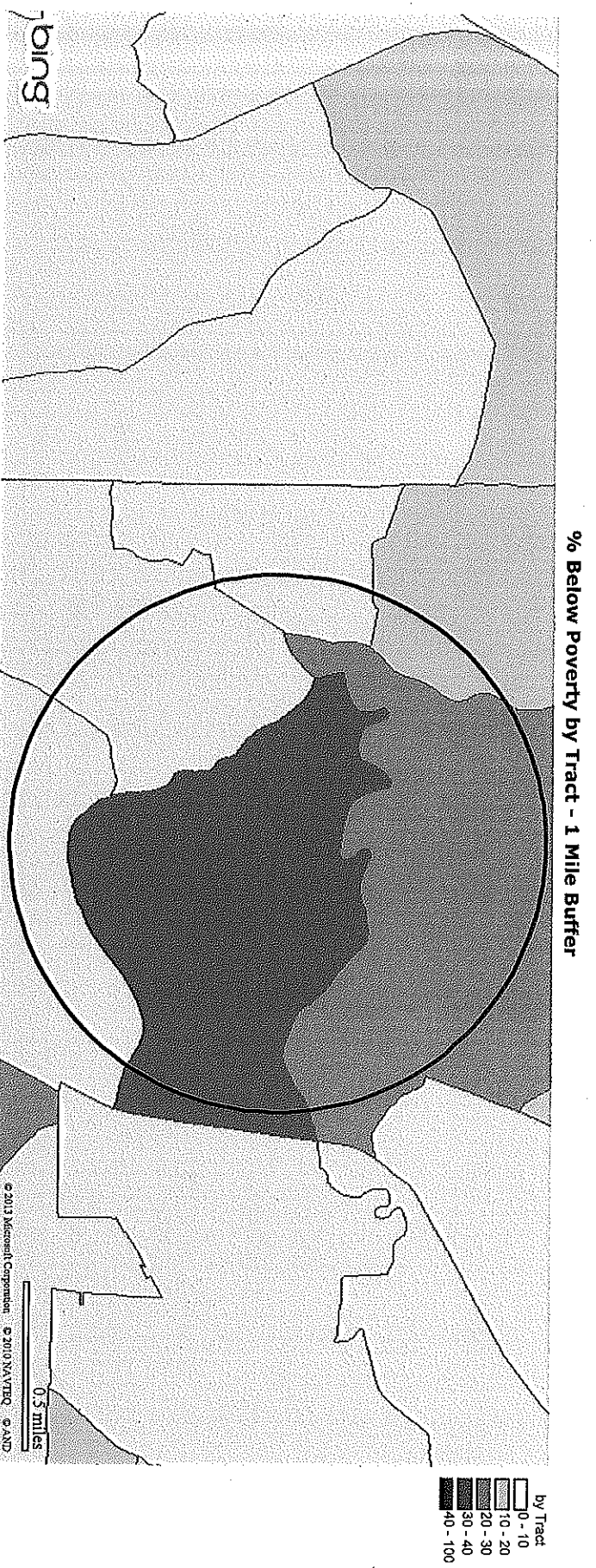
Population by Sex	Number	Percent
Male	5,097	46%
Female	5,975	54%

Population by Age	Number	Percent
Age 0-4	343	3%
Age 0-17	1,079	10%
Age 18+	9,993	90%
Age 65+	1,089	10%

Households by Tenure	Number	Percent
Total	3,485	
Owner Occupied	1,434	41%
Renter Occupied	2,051	59%

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.

Source: U.S. Census Bureau, Census 2010 Summary File 1.



Scoping Summary Appendix F Transcript

In The Matter Of:
Public Scoping Meeting
2015-2025 Facilities Master Plan EIS

Edward R. Roybal Campus
January 17, 2013

American Court Reporting Company, Inc.
52 Executive Park South
Suite 5201
Atlanta, Georgia 30329-2217
(404) 892-1331 - (800) 445-2842

Original File 66242.TXT

Min-U-Script® with Word Index

<p style="text-align: right;">Page 0</p> <p style="text-align: center;">PUBLIC SCOPING MEETING</p> <p style="text-align: center;">2015-2025 FACILITIES MASTER PLAN EIS</p> <p style="text-align: center;">FOR THE CENTERS FOR DISEASE CONTROL</p> <p style="text-align: center;">AND PREVENTION'S (CDC)</p> <p style="text-align: center;">EDWARD R. ROYBAL CAMPUS</p> <p style="text-align: center;">- - -</p> <p style="text-align: center;">Commencing at 7:30 p.m.</p> <p style="text-align: center;">January 17, 2013</p> <p style="text-align: center;">Tom Harkin Global Communications Center</p> <p style="text-align: center;">Building 19</p> <p style="text-align: center;">1600 Clifton Road NE</p> <p style="text-align: center;">Atlanta, Georgia</p> <p style="text-align: center;">- - -</p>	<p style="text-align: right;">Page 3</p> <p>1 PUBLIC SCOPING MEETING</p> <p>2 MR. CHANDLER: Thanks for coming out.</p> <p>3 We'll actually get started with the formal part</p> <p>4 of tonight's meeting in about five minutes or so,</p> <p>5 so we're almost there. Thank you.</p> <p>6 (Brief pause.)</p> <p>7 MR. CHANDLER: Good evening, and</p> <p>8 welcome to the Edward R. Roybal Campus, global</p> <p>9 headquarters of the Centers for Disease Control</p> <p>10 and Prevention, an Operating Division of the</p> <p>11 Department of Health and Human Services.</p> <p>12 I appreciate you all taking time from</p> <p>13 your busy schedules tonight to join us at the</p> <p>14 Public Scoping Meeting for the new 2015-2025</p> <p>15 Roybal Campus Master Plan Environmental Impact</p> <p>16 Statement, or EIS for short.</p> <p>17 My name is George Chandler, and I am a</p> <p>18 Senior Advisor at CDC, currently responsible for</p> <p>19 strategic facility planning and developing the</p> <p>20 2015-2025 Roybal Plan and EIS.</p> <p>21 First, a couple housekeeping items:</p> <p>22 Restrooms are located at the end of the corridor</p> <p>23 to my right, outside the auditorium. Because</p> <p>24 this is a secure federal campus, please stay in</p> <p>25 the vicinity of the auditorium and do not explore</p>
<p style="text-align: right;">Page 2</p> <p>1 SPEAKERS:</p> <p>2 George F. Chandler, CDC</p> <p>3 Toby Kizner, Jacobs Engineering</p> <p>4 John Bugga, Mason Mill Civic Association</p> <p>5 Bruce MacGregor, Druid Hills Civic Association</p> <p>6 Ntale Kajumba</p> <p>7 Hal Foster, Victoria Estates</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">Page 4</p> <p>1 or leave the building except by the way you</p> <p>2 entered, through the security checkpoint.</p> <p>3 If you need to take a call or text</p> <p>4 message, please step out into the lobby or</p> <p>5 hallway.</p> <p>6 If you wish to make comments or offer</p> <p>7 information which you believe CDC should consider</p> <p>8 in the planning and EIS processes, you may use</p> <p>9 the comment cards provided in the lobby, or you</p> <p>10 may make a verbal statement tonight, or you may</p> <p>11 submit electronic or mail-in comments to the</p> <p>12 addresses that will be shown on the final slide</p> <p>13 of this presentation and that are also in the</p> <p>14 brochure, or you may use any combination of these</p> <p>15 comment methods.</p> <p>16 Please note that scoping comments must</p> <p>17 be received on or before February 1st, 2013.</p> <p>18 All comments received will become part of the</p> <p>19 public record for the EIS.</p> <p>20 The formal portion of the Scoping</p> <p>21 Meeting tonight will be noted and transcribed by</p> <p>22 a court reporter and will be available as part of</p> <p>23 the Draft EIS.</p> <p>24 I hope that you found the poster</p> <p>25 boards, pre-Master Plan video presentation, and</p>

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1 general information provided at the informal
2 portion of tonight's meeting helpful.

3 In this portion of the Scoping Meeting,
4 we will go over the planning and EIS processes in
5 a bit more detail and follow up with an
6 opportunity for anyone in attendance tonight to
7 make a verbal statement for the record. If you
8 wish to make a verbal statement and have not
9 already signed up, please hold up your hand, and
10 a CDC staff member will assist you with
11 registration.

12 Commenters will be identified through
13 the registration sheets in no particular order.
14 Please stand when your name is called, and a CDC
15 representative will bring a microphone to you.
16 When you receive the microphone, please clearly
17 state your name and the organization you
18 represent or if you're speaking as a private
19 citizen for the reporter.

20 In order to give everyone a chance to
21 speak -- that might not be too much of a problem
22 tonight -- I ask that you please limit your
23 comments to no more than three minutes and that
24 your comments pertain to the issue at hand, the
25 Roybal Campus 2015-2025 Master Plan, the EIS, or

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1 an area of potential impact that we should
2 consider. If you are approaching the
3 three-minute mark, I or another CDC staff member
4 will verbally alert you.

5 So why did CDC ask you here tonight?
6 Under an EIS, scoping is an early, open process
7 for determining the scope or range of issues to
8 be addressed in the EIS and for identifying the
9 significant issues that might result from
10 implementing one of several potential future
11 Roybal Campus Master Plan alternatives. It is an
12 opportunity to actively engage in early public
13 involvement in the planning process as we develop
14 a range of alternatives and potentially
15 significant impact areas. It is also an
16 opportunity to get information directly from CDC
17 as the process unfolds and how we are taking your
18 comments and concerns into account when we select
19 a preferred alternative.

20 CDC is preparing a new Master Plan for
21 the Roybal Campus in large part because the
22 previous 2000-2009 Master Plan has been
23 implemented at Roybal through the replacement and
24 expansion of the 1950s and 1960s buildings
25 originally on site. A new long-range plan is

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1 needed to guide future development of the Campus.
2 The objectives of the 2009 plan were
3 substantially different from those of the new
4 2025 plan in that the previous plan sought to
5 address outdated, antiquated, and overcrowded
6 facilities, particularly biological labs, that
7 were not suitable for long-term use, and the CDC
8 was growing at that time.

9 The 2009 plan addressed these long-term
10 facility needs through the provision of safe,
11 modern, flexible lab, lab support and office
12 buildings, upgraded and expanded utility systems,
13 and greatly improved physical security at the
14 Campus.

15 In contrast, the 2015-2025 Plan does
16 not envision the wholesale replacement of
17 facilities due to age or obsolescence. The new
18 plan will examine the need to add space based on
19 new or changing mission requirements, potential
20 agency growth, and in response to increased
21 federal cost and occupancy efficiency
22 requirements for owned and leased space.

23 Through the EIS process, potential
24 future expansion needs will take into account
25 impacts to the natural and built environments

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1 through the development of various Campus
2 alternatives that will be shared with the public
3 and with local, state, and other federal agencies
4 and stakeholders for review and comment prior to
5 CDC selecting a development alternative for the
6 2015-2025 Plan.

7 At this point in the process, scoping,
8 CDC does not have a preferred alternative and we
9 do not have detailed information on the number of
10 employees, sizes of buildings, and potential
11 impacts of the various alternatives. This
12 information will be made available for public
13 review and comment during the second phase of the
14 EIS and a planning process, the Draft
15 Environmental Impact Statement, or DEIS, which
16 will be discussed later in this presentation.

17 CDC does have a range of conceptual
18 alternatives and broad areas of potential
19 environmental concerns to present to you this
20 evening as we move into detailed planning and
21 impact analysis. In no particular order, the six
22 conceptual alternatives at the outset of the
23 scoping process are:

24 No action, or status quo, with no new
25 construction of labs, office buildings, or

Page 9	Page 11
<p>1 parking decks at Roybal over the 2015-2025 2 planning period.</p> <p>3 Increase existing space efficiency, 4 where CDC could increase the number of personnel 5 at the Campus by laying out space differently and 6 by increasing -- by increasing office sharing and 7 other modern workplace practices for office-type 8 space. No new office buildings and labs would be 9 constructed under this alternative, but it is 10 possible that efficiency-driven growth could 11 result in the construction of an additional 12 parking deck.</p> <p>13 A laboratory/office mix, where CDC 14 could construct some combination of laboratories, 15 office space, and a parking deck, depending on 16 future growth trends, similar to the mix of lab 17 and office uses currently at the Campus.</p> <p>18 The office program focus, where CDC 19 could construct only office-type space and a 20 parking deck to consolidate leases to Roybal and 21 to accommodate future growth.</p> <p>22 Laboratory program focus, where CDC 23 could construct only lab, lab support, and a 24 parking deck at Roybal, depending on future 25 laboratory-based mission growth.</p>	<p>1 in evaluating these conceptual alternatives, 2 including but not limited to traffic and 3 transportation-related impacts; air and water 4 quality impacts; electricity, water, and natural 5 gas supply and distribution system impacts; 6 cumulative impacts in the study area resulting 7 from the development plans of other major Clifton 8 corridor employers; and overall community quality 9 of life in the study area.</p> <p>10 At this time, Toby Kizner from Jacobs 11 Engineering, under contract to CDC to assist in 12 the EIS and Master Plan, will explain the EIS 13 processes and timeline in a bit more detail. 14 We'll follow Toby's presentation with an 15 opportunity for verbal public scoping comments 16 from the audience.</p> <p>17 MS. KIZNER: Hi. My name is Toby 18 Kizner. I'm with Jacobs, and I am the consultant 19 project manager for the EIS.</p> <p>20 The EIS will be prepared pursuant to 21 the National Environmental Policy Act of 1969, 22 commonly referred to as NEPA, which establishes 23 national policy for the protection of the 24 environment. NEPA provides for consideration of 25 environmental issues in federal agency planning</p>
Page 10	Page 12
<p>1 And a relocation alternative, where CDC 2 could relocate major portions of current 3 office-type functions from Roybal to another CDC 4 Campus and backfill the existing office space 5 with potential future growth or programs that 6 would more directly benefit from close proximity 7 to laboratories. New labs and a parking deck 8 could be constructed under this alternative but 9 no new office buildings.</p> <p>10 Please note that there could be 11 possible sub-alternatives and combinations of 12 these alternatives as CDC develops future 13 requirements and based on comments received 14 during the scoping and DEIS phases of the 15 planning and impact review processes. I also 16 note that eventual approval of the 2015-2025 17 Master Plan and EIS does not constitute actual 18 authority or funding for CDC to construct new 19 facilities. Major new construction at Roybal 20 would have to be authorized and funded through 21 the Department of Health and Human Services, 22 Office of Management and Budget, and 23 Congressional budget processes.</p> <p>24 CDC has identified a number of 25 potential impact areas that need to be considered</p>	<p>1 and decision-making, mandates public disclosure 2 of impacts from federal activities, and actively 3 solicits public participation throughout the 4 process. NEPA also requires that there be an 5 early and open process for determining the scope 6 of the issues to be addressed in an environmental 7 impact statement. This process is commonly known 8 as scoping, which is the purpose of tonight's 9 meeting.</p> <p>10 As George already mentioned, this is 11 the public's opportunity to identify significant 12 issues to be considered in the EIS. Input 13 received tonight, as well as through written 14 comments, will be factored into the development 15 of our EIS analyses and mitigation, if necessary.</p> <p>16 The EIS will include assessments of the 17 existing or current conditions; future conditions 18 within the study area independent of the proposed 19 project, known as the no-build condition; as well 20 as future conditions with the proposed project in 21 place, identified as the future build condition, 22 for each element of the proposed project.</p> <p>23 As George previously mentioned, key 24 areas of analysis for the EIS will include 25 traffic and transportation, air and water</p>

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1 quality, utility capacity, overall community
2 quality of life, and the cumulative impacts of
3 future growth within the study area. Other areas
4 that will be evaluated in the EIS include land
5 use, public policy, community facilities, urban
6 design and visual resources, cultural resources,
7 noise, socioeconomic conditions, hazardous
8 materials, natural resources and sustainability.
9 The NEPA process will take roughly 14
10 to 16 months and involves the following steps:
11 The NEPA process officially starts with
12 the publication of the notice of intent to
13 prepare an EIS, commonly referred to as the NOI.
14 This is the first public notice regarding the
15 EIS, and it starts the scoping process and also
16 advertises the public Scoping Meeting. The NOI
17 for this project was published in the Federal
18 Register, Atlanta Journal Constitution, the
19 Decatur Dispatch, as well as community websites
20 starting on November 17, 2012.
21 Once scoping is complete, we will
22 process the public comments and commence our
23 preparation of the Draft EIS. In addition to
24 looking at the Roybal Campus, CDC has determined
25 that our study area for analysis of the EIS will

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1 cover a 1-mile radius surrounding the Campus,
2 bounded roughly by LaVista Road to the north,
3 Clairmont Road to the east, the DeKalb County
4 border to the west, and the land south of Decatur
5 Road to the south. This will enable us to
6 consider impacts to the larger community.
7 The DEIS discloses to the public why
8 the action is needed, alternatives available to
9 address the need for action, and what the impacts
10 will be from the action.
11 It is anticipated that this DEIS will
12 be issued and available for public comment this
13 coming summer or fall 2013. The DEIS will be
14 available for a minimum of 45 days for public
15 comment, and a public hearing will be held within
16 the comment period. Public comments will be
17 solicited in the same manner as the scoping
18 comments.
19 Similar to the NOI, a notice of
20 availability of the EIS will be published in the
21 same newspapers and websites, which will identify
22 where the DEIS will be made available for public
23 review, the time frame for the public comment
24 period, as well as advertise the DEIS public
25 hearing date. At this point, we estimate that

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1 the DEIS public hearing will be scheduled for
2 late summer or fall 2013.
3 After the DEIS comment period is over,
4 CDC and the EIS team will review all comments,
5 address substantive issues raised, and identify a
6 preferred alternative in a revised document.
7 This revised document will become our Final EIS.
8 The Final, or FEIS, will also be made available
9 for public review within a 30-day review period,
10 currently planned for fall 2013 or winter of
11 2014.
12 At the end of our 30-day review period,
13 CDC will issue a Record of Decision. The Record
14 of Decision concludes the NEPA process and
15 finalizes the federal decision in terms of the
16 selected alternative that will be implemented and
17 any mitigation proposed.
18 Thank you for attending our Scoping
19 Meeting tonight and for your continued
20 participation in the EIS process. Now we will
21 move to the public comment section of tonight's
22 meeting. If you wish to make comments or offer
23 information you believe CDC should consider in
24 the planning and EIS processes, you may use the
25 comment cards provided in the lobby, or you may

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1 make a verbal statement tonight, or you may
2 submit electronic or mail-in comments to the
3 addresses shown on the slide, which is also in
4 your brochure. Please note that scoping comments
5 must be received on or before February 1st, 2013.
6 All comments received will become part of the
7 public record for this EIS.
8 The formal portion of the meeting
9 tonight will be noted and transcribed by a court
10 reporter and will be available as part of the
11 Draft EIS.
12 If you wish to make a verbal statement
13 and have not already signed up, please hold up
14 your hand, and a CDC staff member will assist you
15 with registration. Commenters will be identified
16 from their registration sheets in no particular
17 order. Please stand when your name is called,
18 and a CDC representative will bring a microphone
19 to you. When you receive the microphone, please
20 clearly state your name and the organization you
21 represent or if you are speaking as a private
22 citizen to the reporter.
23 In order to give everyone a chance to
24 speak -- actually, we won't limit comments
25 tonight. We generally give comments for three

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1 minutes, but -- and have your comments pertain to
2 the issue at hand, the Roybal Campus 2015-2025
3 Master Plan, the EIS, or an area of potential
4 impact that we should consider.
5 Now let's begin with the public comment
6 portion.
7 MR. BUGGA: Thank you very much. My
8 name is John Bugga. I am the president of the
9 Mason Mill Civic Association, which is a
10 neighborhood located about half a mile northeast
11 of the CDC.
12 I'm very happy to be here. I'm happy
13 to be able to participate in the process. I
14 don't have any significant questions at the
15 moment, although one just occurred to me: One of
16 the slides, I believe, mentioned tree cover or
17 trees. And I'm wondering what plans there are to
18 maintain the existing tree cover, such as it is,
19 and it doesn't seem to be very -- doesn't seem to
20 be sufficient, and whether there are any --
21 there's any intentions to increase it. And I say
22 that in the context of Emory University's policy,
23 which has a policy of no loss of tree cover,
24 which has been in force for a number of years.
25 And that's my question.

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1 MS. KIZNER: Natural resources will be
2 a topic of analysis in the EIS. Thank you for
3 your comment. Do we have any other comments
4 tonight? I'd like to thank everybody who's here
5 tonight. Another comment. I'm sorry.
6 MR. MACGREGOR: Thank you. I'm also
7 glad to be here. I'm Bruce MacGregor. I'm the
8 president of the Druid Hills Civic Association,
9 which surrounds this august organization.
10 I'd like to adjunct what Mr. Bugga said
11 and also ask that you carefully consider the
12 traffic and transportation ease and to work
13 closely with Emory in terms of their carpooling
14 and mass transit and alternative transportation
15 issues.
16 This is -- the next issue is really
17 larger than the CDC, but I'd also like for you to
18 pursue payment in lieu of taxes to local
19 governments. We have huge numbers of
20 public-sector employers in central DeKalb and --
21 which creates infrastructure issues that don't
22 pay taxes. I understand that in other parts of
23 the country, there are provisions for this.
24 Thank you.
25 MS. KIZNER: Thank you. Do we have any

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1 other commenters?
2 MS. KAJUMBA: My name is Ntale Kajumba.
3 I have a brief question.
4 You've mentioned a previous Master Plan
5 for, I guess, the year 2000 -- that covered the
6 year 2000 to 2009 maybe. Is there any place that
7 we can find that? I know you talked about the
8 differences between this Master Plan and the
9 next. But can we find the original Master Plan
10 as a reference?
11 MS. KIZNER: George?
12 MR. CHANDLER: We can find or make
13 available the 1996 Environmental Impact Statement
14 and all of the analyses that pertain to that
15 plan. In general, the plans are not public
16 documents. This one we're redacting to make it a
17 public document. But we can give you access to
18 all the documentation that supported that claim,
19 the old Environmental Impact Statement that was
20 prepared in '09. That had the transportation
21 model that was in a lot of the impact statements.
22 MS. KAJUMBA: One additional question:
23 Is there going to be a repository like for your
24 presentations, et cetera, that we can go look at
25 for background information to capture this

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1 Scoping Meeting, et cetera?
2 MS. KIZNER: The presentation will be
3 made available. Will we be posting it online
4 CDC?
5 MR. CHANDLER: Yes, in the portal.
6 MS. THOMAS: Can you go to the
7 microphone? I'm not able to hear your comments.
8 MR. CHANDLER: Thank you. Sorry. Can
9 you hear me? Yes. We will put all of the
10 background information available online through
11 the portal. It will also be available in the
12 Draft Environmental Impact Statement and the
13 Final Environmental Impact Statement.
14 MR. FOSTER: Yes. Thank you. My name
15 is Hal Foster. I'm a resident of Victoria
16 Estates, which borders on the edge right down --
17 right down Mason Mill.
18 I was under the impression from some --
19 the grapevine in the neighborhood that there was
20 going to be a lot of building down the hill and
21 through the woods and back up, which, apparently,
22 everything I've seen, is not the case, at least
23 not with CDC. So -- but a minute ago, you did
24 mention a 1-mile radius of -- of interest. And
25 what I'd like to know is what exactly does that

Page 21

1 consist of as far as your -- your interest and
2 study and whatnot, because that does include our
3 neighborhood.

4 MS. KIZNER: Our 1-mile radius is a
5 study area for all the topics in the analysis
6 conducted in the Environmental Impact Statement.
7 That area will be covered in those analyses.

8 MR. FOSTER: So this will be then to
9 come; right?

10 MS. KIZNER: Yes.

11 MR. FOSTER: Thank you.

12 MS. KIZNER: Thank you.

13 MR. CHANDLER: This is George Chandler.
14 I'd just add for clarification, CDC is not
15 considering any additional property acquisition
16 outside of the existing boundaries of Roybal
17 Campus under these alternatives.

18 MS. KIZNER: Do we have any other
19 comments this evening? Thank you, everybody.
20 (Meeting adjourned at 7:56 p.m.)
21
22
23
24
25

Page 22

1 C E R T I F I C A T E

2 STATE OF GEORGIA)

3 COUNTY OF DEKALB)

4 I hereby certify that the foregoing
5 transcript was taken down, as stated in the
6 caption, and the proceedings were reduced to
7 typewriting under my direction and control.

8 I further certify that the transcript is a
9 true and correct record of the evidence given at
10 the said proceedings.

11 I further certify that I am neither a
12 relative nor employee nor attorney nor counsel to
13 any of the parties, nor financially or otherwise
14 interested in this matter.

15 This the 26th day of January 2013.
16
17

18 AUDREY MICHELLE LING, CCR-B-1752
19
20
21
22
23
24
25























Appendix B

Transportation

Master Plan Project
3: Briarcliff Rd & Lavista Rd

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	58	190	222	201	503	68	95	667	94	28	607	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	12	12	10	12	14	12	12	10	12	10
Storage Length (ft)	150		0	200		0	200		450	125		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.919			0.982				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1636	1639	0	1770	1707	0	1851	1827	1553	1604	1810	1436
Flt Permitted	0.085			0.187			0.096			0.067		
Satd. Flow (perm)	146	1639	0	348	1707	0	187	1827	1553	113	1810	1436
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		39			5				109			109
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		608			3539			1422			808	
Travel Time (s)		11.8			68.9			27.7			15.7	
Peak Hour Factor	0.89	0.89	0.89	0.95	0.95	0.95	0.89	0.89	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	5%	5%	5%
Adj. Flow (vph)	65	213	249	212	529	72	107	749	101	30	653	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	65	462	0	212	601	0	107	749	101	30	653	17
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			14			14	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.00	1.00	1.09	1.00	0.92	1.00	1.00	1.09	1.00	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	

AM Peak Hour

Synchro 8 Report
Page 1

Master Plan Project
3: Briarcliff Rd & Lavista Rd

Existing Conditions

6/4/2013

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	8			4			6		6	2		2
Detector Phase	3	8		7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	10.0	20.0		10.0	20.0		10.0	20.0	20.0	10.0	20.0	20.0
Total Split (s)	15.0	52.0		18.0	55.0		13.0	67.0	67.0	13.0	67.0	67.0
Total Split (%)	10.0%	34.7%		12.0%	36.7%		8.7%	44.7%	44.7%	8.7%	44.7%	44.7%
Maximum Green (s)	9.0	46.0		12.0	49.0		7.0	61.0	61.0	7.0	61.0	61.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	3.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	9.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)	54.2	43.0		61.8	52.2		70.4	66.2	66.2	67.5	61.0	61.0
Actuated g/C Ratio	0.36	0.29		0.41	0.35		0.47	0.44	0.44	0.45	0.41	0.41
v/c Ratio	0.49	0.93		0.82	1.01		0.65	0.93	0.14	0.26	0.89	0.03
Control Delay	39.0	73.7		55.5	77.4		43.4	51.6	2.4	25.5	56.7	0.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.0	73.7		55.5	77.4		43.4	51.6	2.4	25.5	56.7	0.1
LOS	D	E		E	E		D	D	A	C	E	A
Approach Delay		69.4			71.7			45.5			54.0	
Approach LOS		E			E			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 85 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 58.8

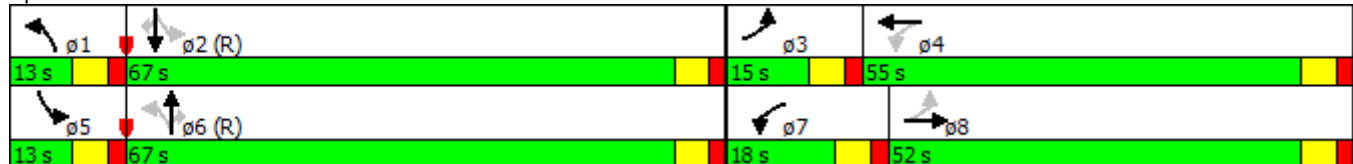
Intersection LOS: E

Intersection Capacity Utilization 95.7%

ICU Level of Service F

Analysis Period (min) 15























Splits and Phases: 3: Briarcliff Rd & Lavista Rd



Master Plan Project
4: N Druid Hills Rd & Lavista Rd

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Volume (vph)	124	243	233	86	731	103	86	766	203	476	1505	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	300		400	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850			0.969		0.998	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3396	0	1787	3567	0
Flt Permitted	0.288			0.576			0.121			0.121		
Satd. Flow (perm)	536	3539	1583	1073	3539	1583	225	3396	0	228	3567	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			253			112			20			1
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		1499			401			1532			2209	
Travel Time (s)		29.2			7.8			29.8			43.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.86	0.95	0.95	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	3%	3%	1%	1%	2%
Adj. Flow (vph)	135	264	253	93	795	112	93	891	236	501	1584	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	135	264	253	93	795	112	93	1127	0	501	1606	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		

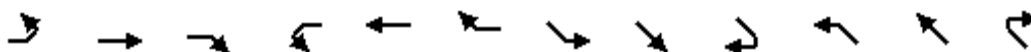
AM Peak Hour

Synchro 8 Report
Page 3

Master Plan Project
4: N Druid Hills Rd & Lavista Rd

Existing Conditions

6/4/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Detector Phase	1	6	6	5	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	10.0	22.0	22.0	10.0	22.0	22.0	10.0	22.0		10.0	22.0	
Total Split (s)	13.0	50.0	50.0	48.0	85.0	85.0	13.0	39.0		13.0	39.0	
Total Split (%)	8.7%	33.3%	33.3%	32.0%	56.7%	56.7%	8.7%	26.0%		8.7%	26.0%	
Maximum Green (s)	7.0	44.0	44.0	42.0	79.0	79.0	7.0	33.0		7.0	33.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effect Green (s)	84.3	77.3	77.3	87.7	79.0	79.0	40.0	33.0		40.0	33.0	
Actuated g/C Ratio	0.56	0.52	0.52	0.58	0.53	0.53	0.27	0.22		0.27	0.22	
v/c Ratio	0.38	0.14	0.27	0.14	0.43	0.13	0.70	1.48		3.77	2.05	
Control Delay	21.8	26.1	10.5	19.3	34.9	12.0	67.6	261.8		1262.6	504.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	21.8	26.1	10.5	19.3	34.9	12.0	67.6	261.8		1262.6	504.1	
LOS	C	C	B	B	C	B	E	F		F	F	
Approach Delay		19.2			30.9			247.0			684.5	
Approach LOS		B			C			F			F	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 95 (63%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 3.77

Intersection Signal Delay: 358.9

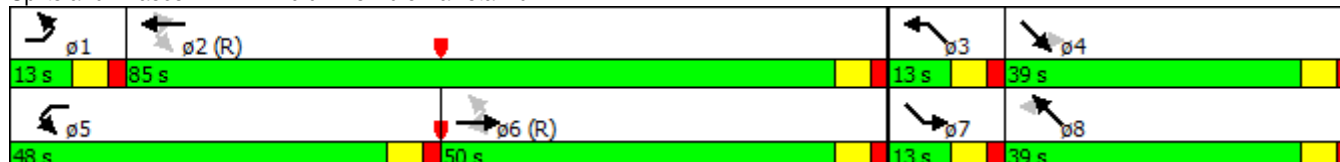
Intersection LOS: F











Intersection Capacity Utilization 101.1%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 4: N Druid Hills Rd & Lavista Rd























						
Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Volume (vph)	270	792	1193	9	15	211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999		0.874	
Flt Protected	0.950				0.997	
Satd. Flow (prot)	1752	1845	1825	0	1639	0
Flt Permitted	0.950				0.997	
Satd. Flow (perm)	1752	1845	1825	0	1639	0
Link Speed (mph)		35	35		30	
Link Distance (ft)		360	596		474	
Travel Time (s)		7.0	11.6		10.8	
Peak Hour Factor	0.97	0.97	0.98	0.98	0.81	0.81
Heavy Vehicles (%)	3%	3%	4%	4%	1%	1%
Adj. Flow (vph)	278	816	1217	9	19	260
Shared Lane Traffic (%)						
Lane Group Flow (vph)	278	816	1226	0	279	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		26	26		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	102.2%			ICU Level of Service G		
Analysis Period (min)	15					

Master Plan Project
7: Briarcliff Rd & Johnson Rd/Driveway

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	461	42	11	20	19	12	25	500	18	55	476	356
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	0		0	250		0	250		150
Storage Lanes	1		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.994			0.968			0.995				0.850
Flt Protected	0.950	0.962			0.981		0.950			0.950		
Satd. Flow (prot)	1681	1692	0	0	1735	0	1752	3487	0	1752	3505	1568
Flt Permitted	0.950	0.962			0.981		0.430			0.415		
Satd. Flow (perm)	1681	1692	0	0	1735	0	793	3487	0	766	3505	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			9			3				405
Link Speed (mph)		35			30			35				35
Link Distance (ft)		1757			282			2736				824
Travel Time (s)		34.2			6.4			53.3				16.1
Peak Hour Factor	0.96	0.96	0.96	0.80	0.80	0.80	0.91	0.91	0.91	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	480	44	11	25	24	15	27	549	20	62	541	405
Shared Lane Traffic (%)	44%											
Lane Group Flow (vph)	269	266	0	0	64	0	27	569	0	62	541	405
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Split	NA		Split	NA		Perm	NA		Perm	NA	Perm
Protected Phases	4	4		8	8			2			6	
Permitted Phases							2			6		6













AM Peak Hour

Synchro 8 Report
Page 6

Master Plan Project
7: Briarcliff Rd & Johnson Rd/Driveway

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	22.5
Total Split (s)	40.0	40.0		33.0	33.0		77.0	77.0		77.0	77.0	77.0
Total Split (%)	26.7%	26.7%		22.0%	22.0%		51.3%	51.3%		51.3%	51.3%	51.3%
Maximum Green (s)	33.5	33.5		26.5	26.5		70.5	70.5		70.5	70.5	70.5
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.5	2.5		2.5	2.5		2.5	2.5		2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5			6.5		6.5	6.5		6.5	6.5	6.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		C-Max	C-Max		None	None	None
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effect Green (s)	28.5	28.5			10.2		94.3	94.3		94.3	94.3	94.3
Actuated g/C Ratio	0.19	0.19			0.07		0.63	0.63		0.63	0.63	0.63
v/c Ratio	0.84	0.83			0.51		0.05	0.26		0.13	0.25	0.36
Control Delay	80.9	78.6			71.1		14.0	12.6		10.4	9.2	2.3
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	80.9	78.6			71.1		14.0	12.6		10.4	9.2	2.3
LOS	F	E			E		B	B		B	A	A
Approach Delay		79.8			71.1			12.7			6.5	
Approach LOS		E			E			B			A	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 73 (49%), Referenced to phase 2:NBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 27.8

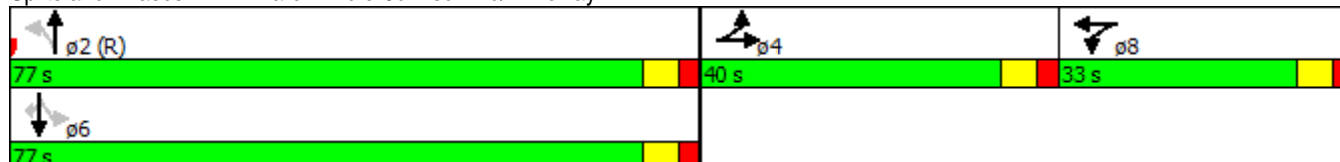
Intersection LOS: C

Intersection Capacity Utilization 54.9%

ICU Level of Service A

Analysis Period (min) 15




















Splits and Phases: 7: Briarcliff Rd & Johnson Rd/Driveway



Master Plan Project
8: Briarcliff Rd & Clifton Rd/Driveway

Existing Conditions

6/4/2013

												
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Volume (vph)	0	663	358	882	643	0	13	10	5	284	0	410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	14	11	10	12	12	12	12	12	12
Storage Length (ft)	316		0	150		0	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								1.00			1.00	0.97
Frt			0.850					0.977				0.850
Flt Protected				0.950				0.977			0.950	
Satd. Flow (prot)	0	3421	1531	1869	3388	0	0	1773	0	0	1736	1553
Flt Permitted				0.161				0.602			0.738	
Satd. Flow (perm)	0	3421	1531	317	3388	0	0	1093	0	0	1343	1505
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			366					5				456
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		824			360			355			1189	
Travel Time (s)		16.1			7.0			6.9			23.2	
Confl. Peds. (#/hr)									3	3		13
Peak Hour Factor	0.97	0.97	0.97	0.94	0.94	0.94	0.92	0.92	0.92	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	4%	4%	4%
Parking (#/hr)									0			
Adj. Flow (vph)	0	684	369	938	684	0	14	11	5	316	0	456
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	684	369	938	684	0	0	30	0	0	316	456
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		14			14			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.92	1.04	1.09	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												













AM Peak Hour

Synchro 8 Report
Page 8

Master Plan Project
8: Briarcliff Rd & Clifton Rd/Driveway

Existing Conditions

6/4/2013

												
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases		6		5	2			4			8	
Permitted Phases	6	6	6	2	2		4			8		8
Detector Phase	6	6	6	5	2		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	4.0	10.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	23.0	23.0	23.0	10.0	23.0		22.3	22.3		22.3	22.3	22.3
Total Split (s)	46.0	46.0	46.0	67.0	113.0		37.0	37.0		37.0	37.0	37.0
Total Split (%)	30.7%	30.7%	30.7%	44.7%	75.3%		24.7%	24.7%		24.7%	24.7%	24.7%
Maximum Green (s)	39.0	39.0	39.0	61.5	106.0		30.7	30.7		30.7	30.7	30.7
Yellow Time (s)	4.5	4.5	4.5	3.0	4.5		3.8	3.8		3.8	3.8	3.8
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	2.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0			0.0			0.0	0.0
Total Lost Time (s)		7.0	7.0	5.5	7.0			6.3			6.3	6.3
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?	Yes	Yes	Yes	Yes								
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max	None	C-Max		None	None		None	None	None
Act Effect Green (s)		39.0	39.0	107.5	106.0			30.7			30.7	30.7
Actuated g/C Ratio		0.26	0.26	0.72	0.71			0.20			0.20	0.20
v/c Ratio		0.77	0.55	1.09	0.29			0.13			1.15	0.68
Control Delay		69.2	21.1	82.4	8.3			44.2			153.6	9.9
Queue Delay		0.0	0.0	0.0	0.0			0.0			0.0	0.0
Total Delay		69.2	21.1	82.4	8.3			44.2			153.6	9.9
LOS		E	C	F	A			D			F	A
Approach Delay		52.3			51.2			44.2			68.7	
Approach LOS		D			D			D			E	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 120 (80%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.15

Intersection Signal Delay: 55.4

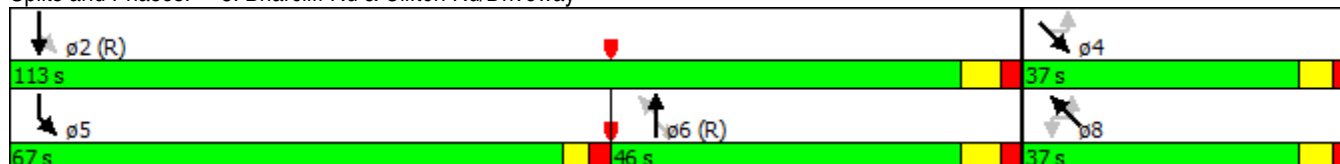
Intersection LOS: E










Intersection Capacity Utilization 106.5%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 8: Briarcliff Rd & Clifton Rd/Driveway


























						
Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Volume (vph)	42	8	394	657	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.976				0.865	
Flt Protected				0.982		
Satd. Flow (prot)	2865	0	0	3510	1644	0
Flt Permitted				0.982		
Satd. Flow (perm)	2865	0	0	3510	1644	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	351			484	251	
Travel Time (s)	8.0			11.0	5.7	
Peak Hour Factor	0.56	0.56	0.92	0.92	0.69	0.69
Heavy Vehicles (%)	23%	23%	1%	1%	0%	0%
Adj. Flow (vph)	75	14	428	714	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	89	0	0	1142	17	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	42.9%			ICU Level of Service A		
Analysis Period (min)	15					

Master Plan Project
13: Houston Mill Road/Houston Mill Rd & Clifton Rd

Existing Conditions

6/4/2013

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	118	466	350	467	679	111	23	21	36	173	348	164
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	480		0	227		52	0		0	100		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	0.98		1.00		0.95	0.99		0.91	0.99	0.99	
Frt		0.936				0.850			0.850		0.952	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	3195	0	1752	3505	1568	1570	1652	1404	1787	1781	0
Flt Permitted	0.380			0.119			0.168			0.592		
Satd. Flow (perm)	686	3195	0	219	3505	1490	276	1652	1280	1098	1781	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		136				176			227		19	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		625			693			484			1787	
Travel Time (s)		12.2			13.5			11.0			40.6	
Confl. Peds. (#/hr)	22		21	21		22	5		20	20		5
Peak Hour Factor	0.85	0.85	0.85	0.95	0.95	0.95	0.86	0.86	0.86	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	15%	15%	15%	1%	1%	1%
Adj. Flow (vph)	139	548	412	492	715	117	27	24	42	184	370	174
Shared Lane Traffic (%)												
Lane Group Flow (vph)	139	960	0	492	715	117	27	24	42	184	544	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	













AM Peak Hour

Synchro 8 Report
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Master Plan Project
13: Houston Mill Road/Houston Mill Rd & Clifton Rd

Existing Conditions

6/4/2013

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6		6	8		8	4		
Detector Phase	5	2		1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	2.0	4.0		2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	
Minimum Split (s)	8.0	21.0		8.0	21.0	21.0	8.0	12.0	12.0	8.0	21.5	
Total Split (s)	19.0	36.0		36.0	53.0	53.0	12.0	16.0	16.0	42.0	46.0	
Total Split (%)	14.6%	27.7%		27.7%	40.8%	40.8%	9.2%	12.3%	12.3%	32.3%	35.4%	
Maximum Green (s)	13.0	30.0		30.0	47.0	47.0	6.0	10.0	10.0	36.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	
Act Effect Green (s)	40.6	30.0		70.1	53.5	53.5	28.6	23.8	23.8	47.9	40.7	
Actuated g/C Ratio	0.31	0.23		0.54	0.41	0.41	0.22	0.18	0.18	0.37	0.31	
v/c Ratio	0.46	1.14		0.95	0.50	0.16	0.23	0.08	0.10	0.36	0.95	
Control Delay	25.1	116.4		49.9	22.8	3.1	30.3	41.4	0.5	30.1	70.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	25.1	116.4		49.9	22.8	3.1	30.3	41.4	0.5	30.1	70.2	
LOS	C	F		D	C	A	C	D	A	C	E	
Approach Delay		104.9			31.1			19.7			60.1	
Approach LOS		F			C			B			E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 97 (75%), Referenced to phase 2:SETL and 6:NWTL, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.14

Intersection Signal Delay: 62.3

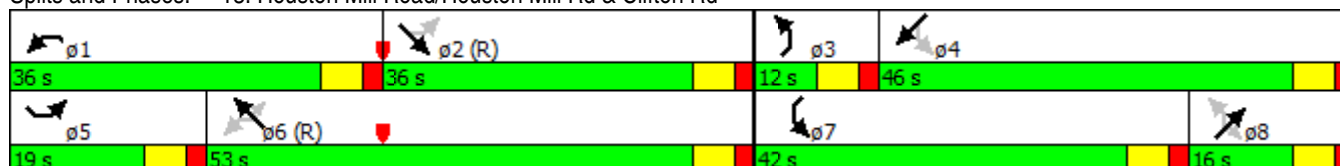
Intersection LOS: E










Intersection Capacity Utilization 94.3%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 13: Houston Mill Road/Houston Mill Rd & Clifton Rd

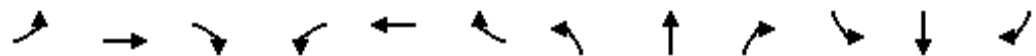


						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	964	0	0	744	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	3471	0	0	3471	1863	0
Flt Permitted						
Satd. Flow (perm)	3471	0	0	3471	1863	0
Link Speed (mph)	35			35	30	
Link Distance (ft)	618			147	312	
Travel Time (s)	12.0			2.9	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	4%	4%	4%	2%	2%
Adj. Flow (vph)	1048	0	0	809	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1048	0	0	809	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	30.0%			ICU Level of Service A		
Analysis Period (min)	15					

Master Plan Project
18: Clifton Rd & Asbury Cir/Haygood Dr

Existing Conditions

6/4/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	77	19	40	19	55	430	22	944	21	112	501	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	12	10	10	12	9	9	10
Storage Length (ft)	100		0	280		0	135		0	110		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00	0.97		0.95	0.99		0.98	1.00		1.00	0.98	
Frt		0.899			0.867			0.997			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1465	1339	0	1652	1489	0	1604	3197	0	1533	2937	0
Flt Permitted	0.087			0.713			0.353			0.075		
Satd. Flow (perm)	134	1339	0	1183	1489	0	584	3197	0	121	2937	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		45			223			2			22	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		671			1358			1232			781	
Travel Time (s)		15.3			30.9			24.0			15.2	
Confl. Peds. (#/hr)	2		63	63		2	43		24	24		43
Peak Hour Factor	0.88	0.88	0.88	0.84	0.84	0.84	0.86	0.86	0.86	0.94	0.94	0.94
Heavy Vehicles (%)	15%	15%	15%	2%	2%	2%	5%	5%	5%	6%	6%	6%
Adj. Flow (vph)	88	22	45	23	65	512	26	1098	24	119	533	119
Shared Lane Traffic (%)												
Lane Group Flow (vph)	88	67	0	23	577	0	26	1122	0	119	652	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.00	1.09	1.09	1.00	1.14	1.14	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	


AM Peak Hour

Synchro 8 Report
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Master Plan Project
18: Clifton Rd & Asbury Cir/Haygood Dr

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4			8		1	6		5	2	
Permitted Phases	4			8			6			2		
Detector Phase	7	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.5	21.8		21.8	21.8		9.2	21.1		9.0	21.1	
Total Split (s)	13.0	68.0		55.0	55.0		14.0	44.0		18.0	48.0	
Total Split (%)	10.0%	52.3%		42.3%	42.3%		10.8%	33.8%		13.8%	36.9%	
Maximum Green (s)	7.5	62.2		49.2	49.2		8.8	38.9		13.0	42.9	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.1		3.0	3.1	
All-Red Time (s)	2.5	2.8		2.8	2.8		2.2	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.8		5.8	5.8		5.2	5.1		5.0	5.1	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	53.7	53.4		40.4	40.4		56.6	50.0		65.5	58.1	
Actuated g/C Ratio	0.41	0.41		0.31	0.31		0.44	0.38		0.50	0.45	
v/c Ratio	0.67	0.12		0.06	0.94		0.08	0.91		0.68	0.49	
Control Delay	46.9	8.6		27.8	49.2		16.7	40.1		74.1	8.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	46.9	8.6		27.8	49.2		16.7	40.1		74.1	8.6	
LOS	D	A		C	D		B	D		E	A	
Approach Delay		30.4			48.4			39.6			18.7	
Approach LOS		C			D			D			B	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 31 (24%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 35.0

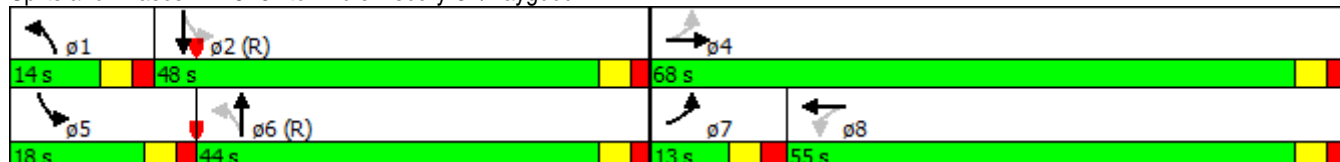
Intersection LOS: D

Intersection Capacity Utilization 84.8%

ICU Level of Service E

Analysis Period (min) 15



















Splits and Phases: 18: Clifton Rd & Asbury Cir/Haygood Dr



Master Plan Project
19: Driveway/Gatewood Rd & Clifton Rd

Existing Conditions

6/4/2013

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	15	649	12	34	1245	150	3	0	19	44	2	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.984			0.884			0.963	
Flt Protected	0.950			0.950				0.993			0.967	
Satd. Flow (prot)	1703	3395	0	1752	3449	0	0	1588	0	0	1685	0
Flt Permitted	0.141			0.354				0.961			0.772	
Satd. Flow (perm)	253	3395	0	653	3449	0	0	1537	0	0	1345	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			17			76			13	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		693			781			193			374	
Travel Time (s)		13.5			15.2			4.4			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.63	0.63	0.63	0.68	0.68	0.68
Heavy Vehicles (%)	6%	6%	6%	3%	3%	3%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	16	705	13	37	1339	161	5	0	30	65	3	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	718	0	37	1500	0	0	35	0	0	94	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4			8		













AM Peak Hour

Synchro 8 Report
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Master Plan Project
19: Driveway/Gatewood Rd & Clifton Rd

Existing Conditions

6/4/2013

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	1	6		5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	11.0	21.6		11.0	21.6		10.0	10.0		10.0	10.0	
Total Split (s)	16.0	82.0		16.0	82.0		32.0	32.0		32.0	32.0	
Total Split (%)	12.3%	63.1%		12.3%	63.1%		24.6%	24.6%		24.6%	24.6%	
Maximum Green (s)	10.0	76.0		10.0	76.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effect Green (s)	99.7	95.0		102.6	99.9			13.2			13.2	
Actuated g/C Ratio	0.77	0.73		0.79	0.77			0.10			0.10	
v/c Ratio	0.06	0.29		0.07	0.56			0.16			0.64	
Control Delay	10.0	22.4		2.6	5.1			1.5			66.2	
Queue Delay	0.0	0.0		0.0	0.4			0.0			0.0	
Total Delay	10.0	22.4		2.6	5.5			1.5			66.2	
LOS	A	C		A	A			A			E	
Approach Delay		22.1			5.4			1.5			66.2	
Approach LOS		C			A			A			E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 36 (28%), Referenced to phase 2:NWTL and 6:SETL, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 12.9







Intersection LOS: B

Intersection Capacity Utilization 59.5%

ICU Level of Service B

Analysis Period (min) 15




















Splits and Phases: 19: Driveway/Gatewood Rd & Clifton Rd

		
ø1	ø2 (R)	ø4
16 s	82 s	32 s
		
ø5	ø6 (R)	ø8
16 s	82 s	32 s

Master Plan Project
21: CDC Entrance/Driveway & Clifton Rd

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	941	502	233	507	4	70	0	24	4	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	13	12	12	12	11	12	12	12	12	12
Storage Length (ft)	260		0	500		0	0		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	0.95	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor		0.99					0.99	0.99			0.99	
Frt		0.949			0.999			0.989	0.850		0.915	
Flt Protected		0.999		0.950			0.950	0.956			0.982	
Satd. Flow (prot)	0	3315	0	1736	3468	0	1658	1635	1534	0	1520	0
Flt Permitted		0.937		0.092			0.745	0.728			0.881	
Satd. Flow (perm)	0	3108	0	168	3468	0	1291	1237	1534	0	1363	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		140			2			76	76		76	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1743			618			453			209	
Travel Time (s)		34.0			12.0			10.3			4.8	
Confl. Peds. (#/hr)	20		20				2					2
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.90	0.90	0.90	0.56	0.56	0.56
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	0%	0%	0%	11%	11%	11%
Adj. Flow (vph)	26	1023	546	251	545	4	78	0	27	7	0	12
Shared Lane Traffic (%)							48%		10%			
Lane Group Flow (vph)	0	1595	0	251	549	0	41	40	24	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.96	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

AM Peak Hour

Synchro 8 Report
Page 18

Master Plan Project
21: CDC Entrance/Driveway & Clifton Rd

Existing Conditions

6/4/2013

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2		1	6			8			3	
Permitted Phases	2			6			8		8	3		
Detector Phase	2	2		1	6		8	8	8	3	3	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		12.0	12.0	12.0	12.0	12.0	
Total Split (s)	88.0	88.0		25.0	113.0		17.0	17.0	17.0	17.0	17.0	
Total Split (%)	67.7%	67.7%		19.2%	86.9%		13.1%	13.1%	13.1%	13.1%	13.1%	
Maximum Green (s)	82.0	82.0		19.0	107.0		11.0	11.0	11.0	11.0	11.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)		6.0		6.0	6.0		6.0	6.0	6.0		6.0	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	C-Max	C-Max		None	C-Max		None	None	None	Max	Max	
Act Effect Green (s)		86.3		107.0	107.0		11.0	11.0	11.0		11.0	
Actuated g/C Ratio		0.66		0.82	0.82		0.08	0.08	0.08		0.08	
v/c Ratio		0.76		0.80	0.19		0.38	0.23	0.12		0.10	
Control Delay		11.5		39.4	2.6		66.8	4.9	1.2		1.1	
Queue Delay		0.0		0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay		11.5		39.4	2.6		66.8	4.9	1.2		1.1	
LOS		B		D	A		E	A	A		A	
Approach Delay		11.5			14.1			28.3			1.1	
Approach LOS		B			B			C			A	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 35 (27%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 12.9

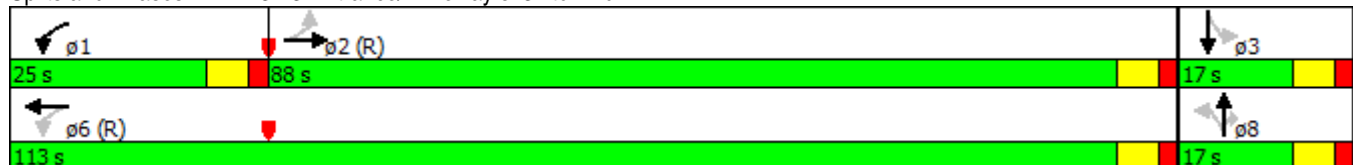
Intersection LOS: B

Intersection Capacity Utilization 77.3%

ICU Level of Service D

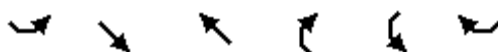
Analysis Period (min) 15

Splits and Phases: 21: CDC Entrance/Driveway & Clifton Rd





Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Volume (vph)	85	873	732	132	32	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	10	8	10	10
Storage Length (ft)	132			110	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1636	3388	3271	1223	1574	1409
Flt Permitted	0.322				0.950	
Satd. Flow (perm)	554	3388	3271	1223	1574	1409
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				110		15
Link Speed (mph)		35	35		30	
Link Distance (ft)		531	625		322	
Travel Time (s)		10.3	12.2		7.3	
Peak Hour Factor	0.87	0.87	0.94	0.94	0.75	0.75
Heavy Vehicles (%)	3%	3%	3%	3%	7%	7%
Parking (#/hr)				0		
Adj. Flow (vph)	98	1003	779	140	43	15
Shared Lane Traffic (%)						
Lane Group Flow (vph)	98	1003	779	140	43	15
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.09	1.04	1.09	1.37	1.09	1.09
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	NA	Perm



Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Protected Phases	1	6	2		8	
Permitted Phases	6			2		8
Detector Phase	1	6	2	2	8	8
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.5	21.5	21.5	21.5	12.0	12.0
Total Split (s)	20.0	85.0	65.0	65.0	35.0	35.0
Total Split (%)	16.7%	70.8%	54.2%	54.2%	29.2%	29.2%
Maximum Green (s)	14.5	79.5	59.5	59.5	29.5	29.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	C-Max	None	None
Act Effect Green (s)	102.5	103.6	90.2	90.2	8.7	8.7
Actuated g/C Ratio	0.85	0.86	0.75	0.75	0.07	0.07
v/c Ratio	0.18	0.34	0.32	0.15	0.38	0.13
Control Delay	2.7	2.6	5.9	2.0	61.5	24.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	2.7	2.6	5.9	2.0	61.5	24.1
LOS	A	A	A	A	E	C
Approach Delay		2.6	5.3		51.8	
Approach LOS		A	A		D	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 31 (26%), Referenced to phase 2:NWT and 6:SETL, Start of Green

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 5.2

Intersection LOS: A

Intersection Capacity Utilization 42.0%

ICU Level of Service A

Analysis Period (min) 15




















Splits and Phases: 24: Clifton Rd & Emory Conf Cntr



Master Plan Project
28: Clifton Road/Clifton Rd & N Decatur Rd

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	390	318	6	0	463	350	12	594	49	120	76	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	8	12	12	12	11	11	10	10	10	10
Storage Length (ft)	150		0	0		0	0		0	200		0
Storage Lanes	1		0	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	0.95	0.95	0.95	0.97	1.00	1.00
Frt		0.997				0.850		0.989			0.900	
Flt Protected	0.950							0.999		0.950		
Satd. Flow (prot)	1752	3494	0	0	1845	1568	0	3414	0	2998	1464	0
Flt Permitted	0.156							0.945		0.950		
Satd. Flow (perm)	288	3494	0	0	1845	1568	0	3229	0	2998	1464	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3				164		6			82	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		1446			1181			498			1113	
Travel Time (s)		28.2			23.0			9.7			21.7	
Peak Hour Factor	0.88	0.88	0.88	0.86	0.86	0.86	0.90	0.90	0.90	0.83	0.83	0.83
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	1%	1%	1%	9%	9%	9%
Adj. Flow (vph)	443	361	7	0	538	407	13	660	54	145	92	184
Shared Lane Traffic (%)												
Lane Group Flow (vph)	443	368	0	0	538	407	0	727	0	145	276	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.20	1.00	1.00	1.00	1.04	1.04	1.09	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA		Prot	NA	
Protected Phases	1	6			2			8		7	4	

AM Peak Hour

Synchro 8 Report
Page 22

Master Plan Project
28: Clifton Road/Clifton Rd & N Decatur Rd

Existing Conditions

6/4/2013

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	6			2		2	8					
Detector Phase	1	6		2	2	2	8	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		2.5	4.0	
Minimum Split (s)	9.1	20.0		20.0	20.0	20.0	22.5	22.5		9.0	20.0	
Total Split (s)	32.0	84.0		52.0	52.0	52.0	34.0	34.0		12.0	46.0	
Total Split (%)	24.6%	64.6%		40.0%	40.0%	40.0%	26.2%	26.2%		9.2%	35.4%	
Maximum Green (s)	26.9	78.5		46.5	46.5	46.5	27.5	27.5		5.5	42.5	
Yellow Time (s)	3.0	3.5		3.5	3.5	3.5	3.0	3.0		3.0	3.0	
All-Red Time (s)	2.1	2.0		2.0	2.0	2.0	3.5	3.5		3.5	0.5	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.1	5.5			5.5	5.5		6.5		6.5	3.5	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		C-Max	C-Max	C-Max	None	None		None	None	
Act Effect Green (s)	78.9	78.5			47.4	47.4		27.5		5.5	42.5	
Actuated g/C Ratio	0.61	0.60			0.36	0.36		0.21		0.04	0.33	
v/c Ratio	0.95	0.17			0.80	0.60		1.06		1.15	0.52	
Control Delay	58.0	11.6			47.9	23.9		99.1		186.4	6.2	
Queue Delay	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay	58.0	11.6			47.9	23.9		99.1		186.4	6.2	
LOS	E	B			D	C		F		F	A	
Approach Delay		36.9			37.6			99.1			68.3	
Approach LOS		D			D			F			E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 24 (18%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.15

Intersection Signal Delay: 57.2

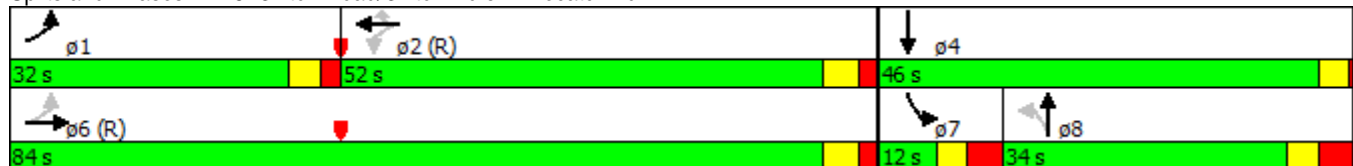
Intersection LOS: E

Intersection Capacity Utilization 95.6%

ICU Level of Service F

Analysis Period (min) 15























Splits and Phases: 28: Clifton Road/Clifton Rd & N Decatur Rd



Master Plan Project
29: Briarcliffe Rd & Summit Pointe Way

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	0	4	28	3	7	38	703	6	6	979	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	175		175	150		150
Storage Lanes	0		1	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.950			0.957		0.950			0.950		
Satd. Flow (prot)	0	1583	1417	0	1818	1615	1752	1845	1568	1770	1863	1583
Flt Permitted		0.725			0.744		0.171			0.333		
Satd. Flow (perm)	0	1208	1417	0	1414	1615	315	1845	1568	620	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			51			51			51			51
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		170			140			596			1342	
Travel Time (s)		3.9			3.2			11.6			26.1	
Peak Hour Factor	0.58	0.58	0.58	0.63	0.63	0.63	0.89	0.89	0.89	0.88	0.88	0.88
Heavy Vehicles (%)	14%	14%	14%	0%	0%	0%	3%	3%	3%	2%	2%	2%
Adj. Flow (vph)	5	0	7	44	5	11	43	790	7	7	1112	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	5	7	0	49	11	43	790	7	7	1112	33
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6













AM Peak Hour

Synchro 8 Report
Page 24

Master Plan Project
29: Briarcliffe Rd & Summit Pointe Way

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0	9.0	21.0	21.0	9.0	21.0	21.0
Total Split (s)	40.0	40.0	40.0	40.0	40.0	40.0	15.0	95.0	95.0	15.0	95.0	95.0
Total Split (%)	26.7%	26.7%	26.7%	26.7%	26.7%	26.7%	10.0%	63.3%	63.3%	10.0%	63.3%	63.3%
Maximum Green (s)	35.0	35.0	35.0	35.0	35.0	35.0	10.0	90.0	90.0	10.0	90.0	90.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0	0		0	0
Act Effect Green (s)		10.3	10.3		10.3	10.3	131.1	130.7	130.7	127.3	123.8	123.8
Actuated g/C Ratio		0.07	0.07		0.07	0.07	0.87	0.87	0.87	0.85	0.83	0.83
v/c Ratio		0.06	0.05		0.51	0.07	0.13	0.49	0.01	0.01	0.72	0.03
Control Delay		64.3	0.8		83.9	0.9	5.6	17.1	0.7	3.0	17.4	1.9
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.6	0.0	0.0	0.2	0.0
Total Delay		64.3	0.8		83.9	0.9	5.6	17.6	0.7	3.0	17.5	1.9
LOS		E	A		F	A	A	B	A	A	B	A
Approach Delay		27.2			68.7			16.9			17.0	
Approach LOS		C			E			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 64 (43%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 18.5

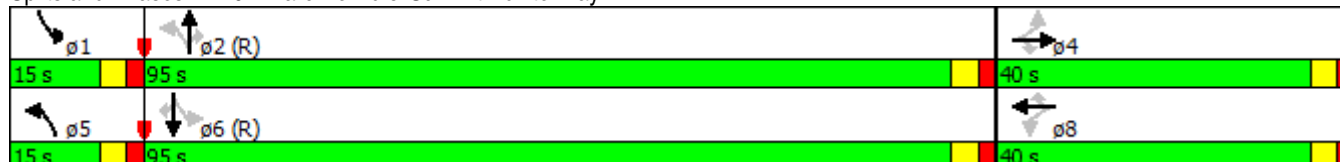
Intersection LOS: B

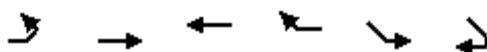
Intersection Capacity Utilization 70.7%

ICU Level of Service C

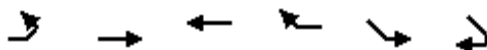
Analysis Period (min) 15

Splits and Phases: 29: Briarcliffe Rd & Summit Pointe Way





Lane Group	EBL	EBT	WBT	WBR	SEL	SER	ø4
Lane Configurations		↑↑	↑↑		↓↓		
Volume (vph)	16	352	1047	662	146	20	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	11	11	10	10	10	
Lane Util. Factor	0.95	0.95	0.95	0.95	0.97	0.95	
Ped Bike Factor		1.00	0.99		1.00		
Frt			0.942		0.982		
Flt Protected		0.998			0.958		
Satd. Flow (prot)	0	3286	3163	0	3173	0	
Flt Permitted		0.795			0.958		
Satd. Flow (perm)	0	2617	3163	0	3162	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			121		10		
Link Speed (mph)		35	35		30		
Link Distance (ft)		1040	506		1014		
Travel Time (s)		20.3	9.9		23.0		
Confl. Peds. (#/hr)	3			3	2		
Peak Hour Factor	0.95	0.95	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	6%	6%	3%	3%	2%	2%	
Adj. Flow (vph)	17	371	1138	720	159	22	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	388	1858	0	181	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		20		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.04	1.04	1.04	1.09	1.09	1.09	
Turning Speed (mph)	15			9	15	9	
Number of Detectors	1	2	2		1		
Detector Template	Left	Thru	Thru		Left		
Leading Detector (ft)	20	100	100		20		
Trailing Detector (ft)	0	0	0		0		
Detector 1 Position(ft)	0	0	0		0		
Detector 1 Size(ft)	20	6	6		20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0		0.0		
Detector 1 Queue (s)	0.0	0.0	0.0		0.0		
Detector 1 Delay (s)	0.0	0.0	0.0		0.0		
Detector 2 Position(ft)		94	94				
Detector 2 Size(ft)		6	6				
Detector 2 Type		Cl+Ex	Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)		0.0	0.0				
Turn Type	pm+pt	NA	NA		NA		
Protected Phases	5	2	6		3		4
Permitted Phases	2						

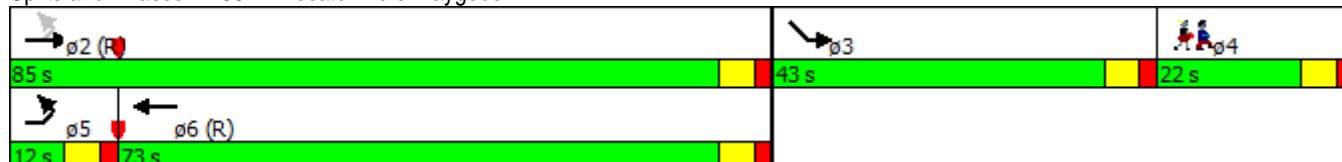


Lane Group	EBL	EBT	WBT	WBR	SEL	SER	ø4
Detector Phase	5	2	6		3		
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0
Minimum Split (s)	10.0	20.0	20.0		20.0		22.0
Total Split (s)	12.0	85.0	73.0		43.0		22.0
Total Split (%)	8.0%	56.7%	48.7%		28.7%		15%
Maximum Green (s)	6.0	79.0	67.0		37.0		16.0
Yellow Time (s)	4.0	4.0	4.0		4.0		4.0
All-Red Time (s)	2.0	2.0	2.0		2.0		2.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		6.0	6.0		6.0		
Lead/Lag	Lead		Lag		Lead		Lag
Lead-Lag Optimize?	Yes		Yes		Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0
Recall Mode	None	C-Max	C-Max		Max		None
Walk Time (s)							5.0
Flash Dont Walk (s)							11.0
Pedestrian Calls (#/hr)							0
Act Effect Green (s)		101.0	101.0		37.0		
Actuated g/C Ratio		0.67	0.67		0.25		
v/c Ratio		0.22	0.86		0.23		
Control Delay		9.8	34.5		43.5		
Queue Delay		0.0	0.0		0.0		
Total Delay		9.8	34.5		43.5		
LOS		A	C		D		
Approach Delay		9.8	34.5		43.5		
Approach LOS		A	C		D		

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 6 (4%), Referenced to phase 2:EBTL and 6:WBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 31.2
Intersection Capacity Utilization 65.1%
Analysis Period (min) 15
Intersection LOS: C
ICU Level of Service C

















Splits and Phases: 33: N Decatur Rd & Haygood Dr



Master Plan Project
37: Houston Mill Rd & Mason Mill Rd

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	16	14	337	6	72	3	145	80	22	430	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	12	12	12	11	12	12	11	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.99			1.00				
Frt		0.964			0.977			0.953				
Flt Protected		0.979			0.961			0.999			0.998	
Satd. Flow (prot)	0	1972	0	0	1756	0	0	1731	0	0	1833	0
Flt Permitted		0.801			0.723			0.994			0.976	
Satd. Flow (perm)	0	1611	0	0	1321	0	0	1723	0	0	1793	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			11			35				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		487			1317			1728			1541	
Travel Time (s)		11.1			29.9			39.3			35.0	
Confl. Peds. (#/hr)	4					4	1					1
Peak Hour Factor	0.82	0.82	0.82	0.92	0.92	0.92	0.82	0.82	0.82	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Adj. Flow (vph)	27	20	17	366	7	78	4	177	98	26	500	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	64	0	0	451	0	0	279	0	0	526	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		

AM Peak Hour

Synchro 8 Report
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Master Plan Project
37: Houston Mill Rd & Mason Mill Rd

Existing Conditions

6/4/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.5	21.5		21.5	21.5		21.5	21.5		21.5	21.5	
Total Split (s)	50.0	50.0		50.0	50.0		60.0	60.0		60.0	60.0	
Total Split (%)	45.5%	45.5%		45.5%	45.5%		54.5%	54.5%		54.5%	54.5%	
Maximum Green (s)	44.5	44.5		44.5	44.5		54.5	54.5		54.5	54.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.5			5.5			5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		38.1			38.1			54.8			54.8	
Actuated g/C Ratio		0.37			0.37			0.53			0.53	
v/c Ratio		0.11			0.92			0.30			0.56	
Control Delay		16.6			56.0			14.2			20.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		16.6			56.0			14.2			20.6	
LOS		B			E			B			C	
Approach Delay		16.6			56.0			14.2			20.6	
Approach LOS		B			E			B			C	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 103.9

Natural Cycle: 55

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 31.1

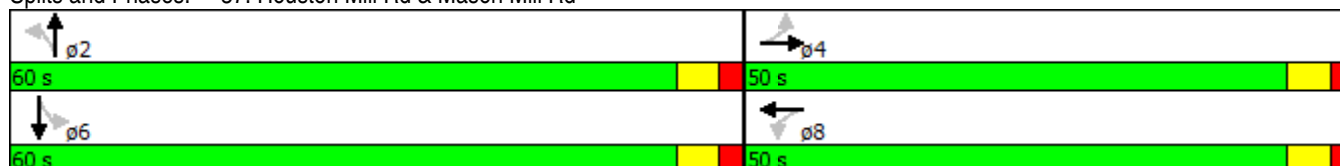
Intersection LOS: C

Intersection Capacity Utilization 75.0%

ICU Level of Service D

Analysis Period (min) 15





















Splits and Phases: 37: Houston Mill Rd & Mason Mill Rd



Master Plan Project
41: Clairmont Rd & Lavista Rd

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	121	185	12	243	594	80	44	1183	6	97	815	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.991			0.981			0.999			0.960	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1846	0	1770	1827	0	1770	3571	0	1770	3398	0
Flt Permitted	0.066			0.614			0.085			0.081		
Satd. Flow (perm)	123	1846	0	1144	1827	0	158	3571	0	151	3398	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			5						36	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		2430			1191			2954			960	
Travel Time (s)		47.3			23.2			57.5			18.7	
Peak Hour Factor	0.92	0.92	0.92	0.88	0.92	0.88	0.92	0.91	0.91	0.94	0.94	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	1%	1%	2%	2%	2%
Adj. Flow (vph)	132	201	13	276	646	91	48	1300	7	103	867	315
Shared Lane Traffic (%)												
Lane Group Flow (vph)	132	214	0	276	737	0	48	1307	0	103	1182	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8			6			2		













AM Peak Hour

Synchro 8 Report
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Master Plan Project
41: Clairmont Rd & Lavista Rd

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	10.0	20.0		10.0	20.0		10.0	20.0		10.0	20.0	
Total Split (s)	22.0	67.0		15.0	60.0		15.0	53.0		15.0	53.0	
Total Split (%)	14.7%	44.7%		10.0%	40.0%		10.0%	35.3%		10.0%	35.3%	
Maximum Green (s)	16.0	61.0		9.0	54.0		9.0	47.0		9.0	47.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effect Green (s)	74.6	61.0		64.9	55.9		54.9	47.3		57.8	50.6	
Actuated g/C Ratio	0.50	0.41		0.43	0.37		0.37	0.32		0.39	0.34	
v/c Ratio	0.61	0.28		0.52	1.08		0.34	1.16		0.68	1.01	
Control Delay	62.6	16.0		29.9	101.1		31.3	96.7		52.3	76.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	62.6	16.0		29.9	101.1		31.3	96.7		52.3	76.0	
LOS	E	B		C	F		C	F		D	E	
Approach Delay		33.8			81.7			94.4			74.1	
Approach LOS		C			F			F			E	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 14 (9%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.16

Intersection Signal Delay: 79.4

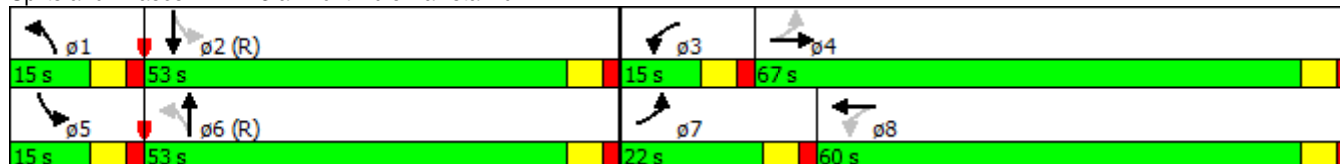
Intersection LOS: E












Intersection Capacity Utilization 101.1%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 41: Clairmont Rd & Lavista Rd



						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	357	65	535	897	84	167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	13	12	11	8
Storage Length (ft)		0	300		200	0
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		1.00		1.00	0.99
Frt	0.979					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1835	0	1847	1881	1728	1386
Flt Permitted			0.423		0.950	
Satd. Flow (perm)	1835	0	821	1881	1723	1369
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	7					190
Link Speed (mph)	35			35	30	
Link Distance (ft)	1434			966	1349	
Travel Time (s)	27.9			18.8	30.7	
Confl. Peds. (#/hr)		4	4		1	1
Peak Hour Factor	0.95	0.95	0.97	0.97	0.88	0.88
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	376	68	552	925	95	190
Shared Lane Traffic (%)						
Lane Group Flow (vph)	444	0	552	925	95	190
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	13			13	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	0.96	1.00	1.04	1.20
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	1
Detector Template	Thru		Left	Thru	Left	Right
Leading Detector (ft)	100		20	100	20	20
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	6		20	6	20	20
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Type	NA		pm+pt	NA	NA	Free
Protected Phases	6		5	2	8	
Permitted Phases			2			Free
Detector Phase	6		5	2	8	
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	
Minimum Split (s)	20.0		10.0	20.0	20.0	
Total Split (s)	67.0		49.0	116.0	34.0	
Total Split (%)	44.7%		32.7%	77.3%	22.7%	
Maximum Green (s)	61.0		43.0	110.0	28.0	
Yellow Time (s)	4.0		4.0	4.0	4.0	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	6.0		6.0	6.0	6.0	
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	C-Max		None	C-Max	None	
Act Effect Green (s)	98.3		124.4	124.4	13.6	150.0
Actuated g/C Ratio	0.66		0.83	0.83	0.09	1.00
v/c Ratio	0.37		0.67	0.59	0.61	0.14
Control Delay	9.2		12.9	13.1	81.4	0.2
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	9.2		12.9	13.1	81.4	0.2
LOS	A		B	B	F	A
Approach Delay	9.2			13.1	27.3	
Approach LOS	A			B	C	

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 130 (87%), Referenced to phase 2:WBTL and 6:EBT, Start of Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.67
 Intersection Signal Delay: 14.1
 Intersection Capacity Utilization 72.1%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service C

Splits and Phases: 42: Houston Mill Rd & Lavista Rd



Master Plan Project
47: Old Briarcliff Rd/Towers Cir & Clifton Rd

Existing Conditions













6/4/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔			↔			↔	
Volume (vph)	69	1199	15	28	445	83	12	66	264	34	13	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	13	12
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.98			1.00	
Frt		0.998			0.978			0.896			0.964	
Flt Protected		0.997			0.997			0.998			0.974	
Satd. Flow (prot)	0	3522	0	0	3339	0	0	1655	0	0	1603	0
Flt Permitted		0.865			0.820			0.988			0.238	
Satd. Flow (perm)	0	3055	0	0	2746	0	0	1638	0	0	391	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			46			111			12	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1189			1743			348			341	
Travel Time (s)		23.2			34.0			7.9			7.8	
Confl. Peds. (#/hr)	12					12			5	5		
Peak Hour Factor	0.94	0.94	0.94	0.93	0.93	0.93	0.79	0.79	0.79	0.68	0.68	0.68
Heavy Vehicles (%)	2%	2%	2%	5%	5%	5%	1%	1%	1%	15%	15%	15%
Adj. Flow (vph)	73	1276	16	30	478	89	15	84	334	50	19	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1365	0	0	597	0	0	433	0	0	94	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Minimum Split (s)	22.0	22.0		22.0	22.0		20.0	20.0		20.0	20.0	
Total Split (s)	104.0	104.0		104.0	104.0		26.0	26.0		26.0	26.0	
Total Split (%)	80.0%	80.0%		80.0%	80.0%		20.0%	20.0%		20.0%	20.0%	
Maximum Green (s)	99.0	99.0		99.0	99.0		21.0	21.0		21.0	21.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effect Green (s)		99.0			99.0			21.0			21.0	
Actuated g/C Ratio		0.76			0.76			0.16			0.16	
v/c Ratio		0.59			0.28			1.21			1.29	
Control Delay		7.9			3.6			153.1			238.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		7.9			3.6			153.1			238.7	

AM Peak Hour

Synchro 8 Report
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		A			A			F			F	
Approach Delay		7.9			3.6			153.1			238.7	
Approach LOS		A			A			F			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 37 (28%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 1.29

Intersection Signal Delay: 40.8















Intersection LOS: D

Intersection Capacity Utilization 84.8%

ICU Level of Service E

Analysis Period (min) 15



















Splits and Phases: 47: Old Briarcliff Rd/Towers Cir & Clifton Rd

											
ø2 (R)						ø4					
104 s						26 s					
											
ø6 (R)						ø8					
104 s						26 s					

Master Plan Project
50: Houston Mill Road & CDC Driveway/Garage

Existing Conditions

6/4/2013

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Volume (vph)	14	0	0	0	0	0	16	44	6	335	18	359	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	8	12	10	12	12	12	12	16	12	12	12	11	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt								0.987				0.850	
Flt Protected	0.950								0.988				0.955
Satd. Flow (prot)	1564	0	1773	0	1900	0	0	1858	0	0	1814	1561	
Flt Permitted	0.950								0.988				0.955
Satd. Flow (perm)	1564	0	1773	0	1900	0	0	1858	0	0	1814	1561	
Link Speed (mph)					30					30			
Link Distance (ft)					289					318			
Travel Time (s)					6.6					7.2			
Peak Hour Factor	0.57	0.57	0.57	0.25	0.25	0.25	0.70	0.70	0.70	0.93	0.93	0.93	
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	13%	13%	13%	0%	0%	0%	
Adj. Flow (vph)	25	0	0	0	0	0	23	63	9	360	19	386	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	25	0	0	0	0	0	0	95	0	0	379	386	
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right	
Median Width(ft)					8					8			
Link Offset(ft)					0					0			
Crosswalk Width(ft)					16					16			
Two way Left Turn Lane													
Headway Factor	1.20	1.00	1.09	1.00	1.00	1.00	1.00	0.85	1.00	1.00	1.00	1.04	
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Sign Control	Stop			Stop			Free			Free			
Intersection Summary													
Area Type:	Other												
Control Type:	Unsignalized												
Intersection Capacity Utilization	36.2%				ICU Level of Service A								
Analysis Period (min)	15												



Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations		↑↑	↑↑		↑↑	
Volume (vph)	25	934	736	19	7	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.996		0.921	
Flt Protected		0.999			0.980	
Satd. Flow (prot)	0	3501	3457	0	1453	0
Flt Permitted		0.999			0.980	
Satd. Flow (perm)	0	3501	3457	0	1453	0
Link Speed (mph)		35	35		30	
Link Distance (ft)		147	531		214	
Travel Time (s)		2.9	10.3		4.9	
Peak Hour Factor	0.92	0.92	1.00	1.00	0.71	0.71
Heavy Vehicles (%)	3%	3%	4%	4%	18%	18%
Adj. Flow (vph)	27	1015	736	19	10	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1042	755	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		10	10		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized
























Intersection Capacity Utilization 53.8% ICU Level of Service A

Analysis Period (min) 15

Master Plan Project
57: Clairmont Rd & N Druid Hills Rd













Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	449	440	381	1617	424	413	780	70	142	906	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		300	300		400	300		0	150		0
Storage Lanes	1		1	1		1	2		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	0.95	0.97	0.95	0.95
Frt			0.850			0.850		0.988			0.997	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3505	1568	1770	3539	1583	3433	3497	0	3433	3529	0
Flt Permitted	0.091			0.418			0.950			0.950		
Satd. Flow (perm)	168	3505	1568	779	3539	1583	3433	3497	0	3433	3529	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			224			272		6			2	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		2209			1641			2226			2954	
Travel Time (s)		43.0			32.0			43.4			57.5	
Peak Hour Factor	0.95	0.95	0.95	0.97	0.97	0.97	0.92	0.92	0.92	0.96	0.96	0.96
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	22	473	463	393	1667	437	449	848	76	148	944	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	22	473	463	393	1667	437	449	924	0	148	964	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						
Minimum Split (s)	10.0	20.0	20.0	10.0	20.0	20.0	10.0	20.0		10.0	20.0	
Total Split (s)	22.0	50.0	50.0	16.0	44.0	44.0	19.0	37.0		47.0	65.0	
Total Split (%)	14.7%	33.3%	33.3%	10.7%	29.3%	29.3%	12.7%	24.7%		31.3%	43.3%	
Maximum Green (s)	16.0	44.0	44.0	10.0	38.0	38.0	13.0	31.0		41.0	59.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Act Effect Green (s)	60.0	44.0	44.0	48.0	38.0	38.0	13.0	31.0		41.0	59.0	
Actuated g/C Ratio	0.40	0.29	0.29	0.32	0.25	0.25	0.09	0.21		0.27	0.39	
v/c Ratio	0.09	0.46	0.75	1.25	1.86	0.72	1.51	1.27		0.16	0.69	
Control Delay	40.6	52.3	37.0	171.8	422.6	26.3	293.4	167.1		24.8	26.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	40.6	52.3	37.0	171.8	422.6	26.3	293.4	167.1		24.8	26.9	

AM Peak Hour

Synchro 8 Report
Page 38

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	D	D	F	F	C	F	F		C	C	
Approach Delay		44.6			313.8			208.4			26.6	
Approach LOS		D			F			F			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 121 (81%), Referenced to phase 2:SBT and 6:NBT, Start of Green

Natural Cycle: 150

Control Type: Pretimed

Maximum v/c Ratio: 1.86

Intersection Signal Delay: 192.2

Intersection LOS: F

Intersection Capacity Utilization 105.5%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 57: Clairmont Rd & N Druid Hills Rd

			
ø1	ø2 (R)	ø3	ø4
19 s	65 s	22 s	44 s
			
ø5	ø6 (R)	ø7	ø8
47 s	37 s	16 s	50 s



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	86	89	166	1237	1652	303
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	200			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Frt	0.931				0.977	
Flt Protected	0.976		0.950			
Satd. Flow (prot)	1709	0	1770	3539	3492	0
Flt Permitted	0.976		0.048			
Satd. Flow (perm)	1709	0	89	3539	3492	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	33				21	
Link Speed (mph)	30			35	35	
Link Distance (ft)	2037			803	2226	
Travel Time (s)	46.3			15.6	43.4	
Peak Hour Factor	0.77	0.77	0.89	0.89	0.93	0.93
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%
Adj. Flow (vph)	112	116	187	1390	1776	326
Shared Lane Traffic (%)						
Lane Group Flow (vph)	228	0	187	1390	2102	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Turn Type	NA		pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases			2			
Minimum Split (s)	20.0		9.0	20.0	20.0	
Total Split (s)	41.0		25.0	109.0	84.0	
Total Split (%)	27.3%		16.7%	72.7%	56.0%	
Maximum Green (s)	36.0		20.0	104.0	79.0	
Yellow Time (s)	4.0		4.0	4.0	4.0	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	5.0		5.0	5.0	5.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Act Effect Green (s)	36.0		104.0	104.0	79.0	
Actuated g/C Ratio	0.24		0.69	0.69	0.53	
v/c Ratio	0.52		0.66	0.57	1.14	
Control Delay	47.1		67.0	7.1	113.0	
Queue Delay	0.0		0.0	0.1	0.0	
Total Delay	47.1		67.0	7.2	113.0	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	D		E	A	F	
Approach Delay	47.1			14.3	113.0	
Approach LOS	D			B	F	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 56 (37%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 90

Control Type: Pretimed

Maximum v/c Ratio: 1.14

Intersection Signal Delay: 69.3

Intersection LOS: E

Intersection Capacity Utilization 87.2%

ICU Level of Service E

Analysis Period (min) 15






















Splits and Phases: 60: Clairmont Rd & Mason Mill Rd



Master Plan Project
61: Clairmont Rd & Southern Ln/Driveway

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	0	23	7	0	28	157	1193	0	0	1120	442
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	0		0	200		200	100		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.850			0.892						0.958	
Flt Protected	0.950				0.990		0.950					
Satd. Flow (prot)	1787	1599	0	0	1678	0	1787	3574	1881	1881	3424	0
Flt Permitted	0.851				0.931		0.073					
Satd. Flow (perm)	1601	1599	0	0	1578	0	137	3574	1881	1881	3424	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		113			65						50	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		796			344			1229			803	
Travel Time (s)		18.1			7.8			23.9			15.6	
Peak Hour Factor	0.75	0.75	0.75	0.88	0.88	0.88	0.95	0.95	0.95	0.91	0.91	0.91
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	65	0	31	8	0	32	165	1256	0	0	1231	486
Shared Lane Traffic (%)												
Lane Group Flow (vph)	65	31	0	0	40	0	165	1256	0	0	1717	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2		2	6		

AM Peak Hour

Synchro 8 Report
Page 42

Master Plan Project
61: Clairmont Rd & Southern Ln/Driveway

Existing Conditions

6/4/2013

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8		5	2	2	6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0		10.0	22.0	22.0	22.0	22.0	
Total Split (s)	66.0	66.0		66.0	66.0		12.0	84.0	84.0	72.0	72.0	
Total Split (%)	44.0%	44.0%		44.0%	44.0%		8.0%	56.0%	56.0%	48.0%	48.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		6.0	78.0	78.0	66.0	66.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0			6.0		6.0	6.0	6.0	6.0	6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max	C-Max	C-Max	C-Max	
Walk Time (s)	5.0	5.0		5.0	5.0			5.0	5.0	5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0	0	0	
Act Effect Green (s)	12.6	12.6			12.3		128.0	129.2				101.4
Actuated g/C Ratio	0.08	0.08			0.08		0.85	0.86				0.68
v/c Ratio	0.49	0.13			0.21		0.48	0.41				0.74
Control Delay	76.6	1.1			6.9		37.5	0.9				2.4
Queue Delay	0.0	0.0			0.0		0.0	0.0				0.6
Total Delay	76.6	1.1			6.9		37.5	0.9				3.0
LOS	E	A			A		D	A				A
Approach Delay		52.2			6.9			5.1				3.0
Approach LOS		D			A			A				A

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 88 (59%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 5.4

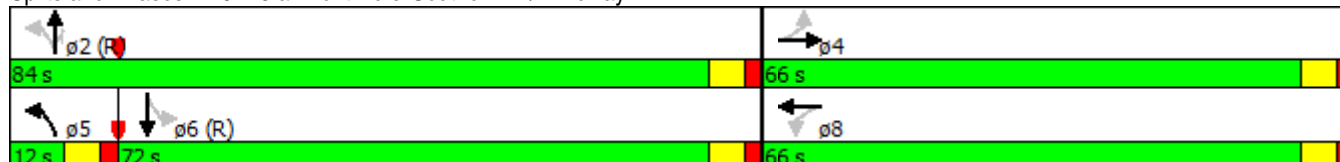
Intersection LOS: A

Intersection Capacity Utilization 78.2%

ICU Level of Service D

Analysis Period (min) 15






















Splits and Phases: 61: Clairmont Rd & Southern Ln/Driveway



Master Plan Project
62: Clairmont Rd & Veterans Affairs Med Cen/Clairmont Lk

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	0	65	34	1	24	326	1272	12	15	968	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		150	100		0	250		0	250		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.855			0.999			0.977	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1810	1538	1719	1547	0	1787	3571	0	1770	3458	0
Flt Permitted	0.736			0.757			0.147			0.210		
Satd. Flow (perm)	1332	1810	1538	1370	1547	0	277	3571	0	391	3458	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			280		31			1			17	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		420			540			1958			1229	
Travel Time (s)		9.5			12.3			38.1			23.9	
Peak Hour Factor	0.80	0.80	0.80	0.78	0.78	0.78	0.98	0.98	0.98	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	1%	1%	1%	2%	2%	2%
Adj. Flow (vph)	82	0	81	44	1	31	333	1298	12	16	1041	184
Shared Lane Traffic (%)												
Lane Group Flow (vph)	82	0	81	44	32	0	333	1310	0	16	1225	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm		Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8			6			2		

AM Peak Hour

Synchro 8 Report
Page 44

Master Plan Project
62: Clairmont Rd & Veterans Affairs Med Cen/Clairmont Lk

Existing Conditions

6/4/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	22.0	22.0	22.0	22.0	22.0		10.0	22.0		10.0	22.0	
Total Split (s)	48.0	48.0	48.0	48.0	48.0		31.0	80.0		22.0	71.0	
Total Split (%)	32.0%	32.0%	32.0%	32.0%	32.0%		20.7%	53.3%		14.7%	47.3%	
Maximum Green (s)	42.0	42.0	42.0	42.0	42.0		25.0	74.0		16.0	65.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Walk Time (s)	5.0	5.0	5.0	5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0			0			0	
Act Effect Green (s)	14.6		14.6	14.6	14.6		123.4	118.6		94.6	88.9	
Actuated g/C Ratio	0.10		0.10	0.10	0.10		0.82	0.79		0.63	0.59	
v/c Ratio	0.64		0.20	0.33	0.18		0.65	0.46		0.05	0.60	
Control Delay	85.4		1.1	67.9	21.2		38.0	4.1		8.5	23.8	
Queue Delay	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	85.4		1.1	67.9	21.2		38.0	4.1		8.5	23.8	
LOS	F		A	E	C		D	A		A	C	
Approach Delay					48.2			11.0			23.6	
Approach LOS					D			B			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 1 (1%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 18.6

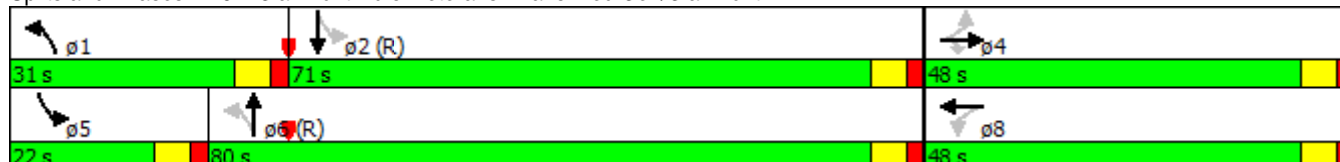
Intersection LOS: B

Intersection Capacity Utilization 75.6%

ICU Level of Service D

Analysis Period (min) 15






















Splits and Phases: 62: Clairmont Rd & Veterans Affairs Med Cen/Clairmont Lk



Master Plan Project
65: Clairmont Rd & N Decatur Rd













Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	207	463	138	72	966	16	269	952	28	102	533	324
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	300		0	150		300	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.966			0.998				0.850		0.943	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3419	0	1770	3532	0	1703	3406	1524	1770	3337	0
Flt Permitted	0.070			0.341			0.098			0.113		
Satd. Flow (perm)	130	3419	0	635	3532	0	176	3406	1524	210	3337	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			1				138		80	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		2167			1750			913			526	
Travel Time (s)		42.2			34.1			17.8			10.2	
Peak Hour Factor	0.92	0.92	0.92	0.88	0.88	0.88	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	6%	6%	6%	2%	2%	2%
Adj. Flow (vph)	225	503	150	82	1098	18	320	1133	33	104	544	331
Shared Lane Traffic (%)												
Lane Group Flow (vph)	225	653	0	82	1116	0	320	1133	33	104	875	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6		6	2		

AM Peak Hour

Synchro 8 Report
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8		7	4		1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	9.5	20.0		9.5	20.0		9.5	20.0	20.0	9.5	20.0	
Total Split (s)	22.0	66.0		15.0	59.0		28.0	54.0	54.0	15.0	41.0	
Total Split (%)	14.7%	44.0%		10.0%	39.3%		18.7%	36.0%	36.0%	10.0%	27.3%	
Maximum Green (s)	16.5	60.5		9.5	53.5		22.5	48.5	48.5	9.5	35.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5		5.5	5.5		5.5	5.5	5.5	5.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	
Act Effect Green (s)	73.8	59.7		60.5	51.9		65.2	50.6	50.6	44.6	35.5	
Actuated g/C Ratio	0.49	0.40		0.40	0.35		0.43	0.34	0.34	0.30	0.24	
v/c Ratio	0.93	0.47		0.26	0.91		0.99	0.99	0.05	0.67	1.03	
Control Delay	82.2	28.5		22.5	58.6		92.4	72.4	0.2	71.9	61.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	82.2	28.5		22.5	58.6		92.4	72.4	0.2	71.9	61.8	
LOS	F	C		C	E		F	E	A	E	E	
Approach Delay		42.2			56.1			75.1			62.8	
Approach LOS		D			E			E			E	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 90 (60%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.03

Intersection Signal Delay: 61.1

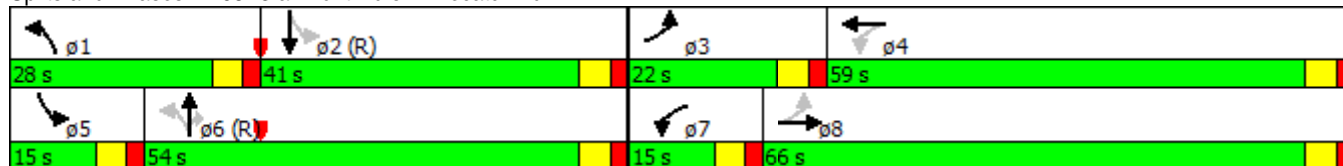
Intersection LOS: E

Intersection Capacity Utilization 97.0%

ICU Level of Service F

Analysis Period (min) 15





















Splits and Phases: 65: Clairmont Rd & N Decatur Rd



Master Plan Project
69: Briarcliff Rd & N Decatur Rd













Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	63	318	68	220	356	92	41	480	168	68	413	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	300		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.974			0.969			0.961			0.988	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1814	0	1752	1787	0	1703	1723	0	1787	1859	0
Flt Permitted	0.213			0.116			0.258			0.063		
Satd. Flow (perm)	397	1814	0	214	1787	0	462	1723	0	119	1859	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			9			14			4	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		963			3080			1244			2528	
Travel Time (s)		18.8			60.0			24.2			49.2	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.90	0.90	0.90	0.86	0.86	0.86
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	6%	6%	6%	1%	1%	1%
Adj. Flow (vph)	76	383	82	239	387	100	46	533	187	79	480	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	76	465	0	239	487	0	46	720	0	79	523	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		

AM Peak Hour

Synchro 8 Report
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	10.0	20.0		10.0	20.0		10.0	20.0		10.0	20.0	
Total Split (s)	13.0	50.0		20.0	57.0		13.0	67.0		13.0	67.0	
Total Split (%)	8.7%	33.3%		13.3%	38.0%		8.7%	44.7%		8.7%	44.7%	
Maximum Green (s)	7.0	44.0		14.0	51.0		7.0	61.0		7.0	61.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effect Green (s)	50.9	44.0		64.0	51.1		67.8	61.1		69.2	63.6	
Actuated g/C Ratio	0.34	0.29		0.43	0.34		0.45	0.41		0.46	0.42	
v/c Ratio	0.38	0.87		1.02	0.79		0.17	1.02		0.60	0.66	
Control Delay	32.3	66.7		98.0	54.7		21.6	80.4		67.0	24.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	32.3	66.7		98.0	54.7		21.6	80.4		67.0	24.5	
LOS	C	E		F	D		C	F		E	C	
Approach Delay		61.9			69.0			76.9			30.1	
Approach LOS		E			E			E			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 79 (53%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 60.9

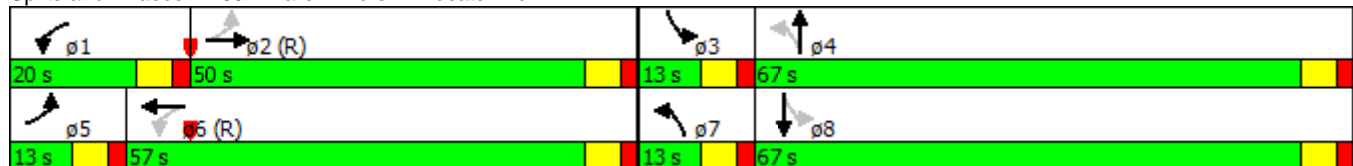
Intersection LOS: E

Intersection Capacity Utilization 92.3%

ICU Level of Service F

Analysis Period (min) 15























Splits and Phases: 69: Briarcliff Rd & N Decatur Rd



Master Plan Project
2: Lavista Rd & N Druid Hills Rd













Existing Conditions

6/4/2013

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	116	1263	85	256	797	80	287	638	321	120	392	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	200		100	300		400
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.991			0.986				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3542	0	1787	3524	0	1770	3539	1583	1787	3574	1599
Flt Permitted	0.125			0.105			0.474			0.305		
Satd. Flow (perm)	235	3542	0	198	3524	0	883	3539	1583	574	3574	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			7				193			124
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		1479			2251			1523			397	
Travel Time (s)		28.8			43.9			29.7			7.7	
Peak Hour Factor	0.97	0.97	0.97	0.91	0.91	0.91	0.95	0.95	0.95	0.88	0.88	0.88
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	120	1302	88	281	876	88	302	672	338	136	445	124
Shared Lane Traffic (%)												
Lane Group Flow (vph)	120	1390	0	281	964	0	302	672	338	136	445	124
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8			6		6	2		2

PM Peak Hour

Synchro 8 Report
Page 1

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	7	4		3	8		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	14.0	10.0		10.0	20.0		10.0	20.0	20.0	20.0	10.0	10.0
Total Split (s)	14.0	38.0		20.0	44.0		14.0	67.0	67.0	25.0	78.0	78.0
Total Split (%)	9.3%	25.3%		13.3%	29.3%		9.3%	44.7%	44.7%	16.7%	52.0%	52.0%
Maximum Green (s)	8.0	32.0		14.0	38.0		8.0	61.0	61.0	19.0	72.0	72.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)	40.0	32.0		52.0	38.0		77.2	69.2	69.2	82.8	72.0	72.0
Actuated g/C Ratio	0.27	0.21		0.35	0.25		0.51	0.46	0.46	0.55	0.48	0.48
v/c Ratio	0.83	1.83		1.30	1.07		0.60	0.41	0.41	0.34	0.26	0.15
Control Delay	77.7	412.7		193.8	105.6		38.5	40.4	23.9	22.5	31.2	12.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.7	412.7		193.8	105.6		38.5	40.4	23.9	22.5	31.2	12.5
LOS	E	F		F	F		D	D	C	C	C	B
Approach Delay		386.0			125.5			35.7			26.2	
Approach LOS		F			F			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 60 (40%), Referenced to phase 2:SWTL and 6:NETL, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.83

Intersection Signal Delay: 168.6

Intersection LOS: F

Intersection Capacity Utilization 98.5%

ICU Level of Service F

Analysis Period (min) 15























Splits and Phases: 2: Lavista Rd & N Druid Hills Rd



Master Plan Project
3: Briarcliff Rd & Lavista Rd

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	45	331	90	85	301	169	82	552	128	104	695	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	12	12	10	12	14	12	12	10	12	10
Storage Length (ft)	150		0	200		0	200		450	125		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.968			0.946				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1636	1726	0	1787	1661	0	1869	1845	1568	1668	1881	1492
Flt Permitted	0.121			0.223			0.064			0.102		
Satd. Flow (perm)	208	1726	0	420	1661	0	126	1845	1568	179	1881	1492
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			19				158			109
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		608			3518			1430			439	
Travel Time (s)		11.8			68.5			27.9			8.6	
Peak Hour Factor	0.97	0.97	0.97	0.87	0.87	0.87	0.81	0.81	0.81	0.91	0.91	0.91
Heavy Vehicles (%)	3%	3%	3%	1%	1%	1%	3%	3%	3%	1%	1%	1%
Adj. Flow (vph)	46	341	93	98	346	194	101	681	158	114	764	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	434	0	98	540	0	101	681	158	114	764	60
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			14			14	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.00	1.00	1.09	1.00	0.92	1.00	1.00	1.09	1.00	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	













PM Peak Hour

Synchro 8 Report
Page 3

Master Plan Project
3: Briarcliff Rd & Lavista Rd

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	8			4			6		6	2		2
Detector Phase	3	8		7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	10.0	20.0		10.0	20.0		10.0	20.0	20.0	10.0	20.0	20.0
Total Split (s)	17.0	50.0		17.0	50.0		13.0	70.0	70.0	13.0	70.0	70.0
Total Split (%)	11.3%	33.3%		11.3%	33.3%		8.7%	46.7%	46.7%	8.7%	46.7%	46.7%
Maximum Green (s)	11.0	44.0		11.0	44.0		7.0	64.0	64.0	7.0	64.0	64.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	3.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	9.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)	53.2	42.2		57.6	49.3		71.0	64.0	64.0	71.0	64.0	64.0
Actuated g/C Ratio	0.35	0.28		0.38	0.33		0.47	0.43	0.43	0.47	0.43	0.43
v/c Ratio	0.31	0.88		0.39	0.97		0.72	0.87	0.21	0.74	0.95	0.09
Control Delay	33.0	70.9		39.5	83.3		57.6	60.8	12.6	49.1	63.8	0.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.0	70.9		39.5	83.3		57.6	60.8	12.6	49.1	63.8	0.2
LOS	C	E		D	F		E	E	B	D	E	A
Approach Delay		67.3			76.6			52.3			57.9	
Approach LOS		E			E			D			E	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 7 (5%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 61.6

Intersection LOS: E











Intersection Capacity Utilization 91.2%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 3: Briarcliff Rd & Lavista Rd























						
Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Volume (vph)	364	749	972	29	19	294
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.996		0.873	
Flt Protected	0.950				0.997	
Satd. Flow (prot)	1770	1863	1874	0	1637	0
Flt Permitted	0.950				0.997	
Satd. Flow (perm)	1770	1863	1874	0	1637	0
Link Speed (mph)		35	35		30	
Link Distance (ft)		312	634		666	
Travel Time (s)		6.1	12.4		15.1	
Peak Hour Factor	0.79	0.79	0.97	0.97	0.86	0.86
Heavy Vehicles (%)	2%	2%	1%	1%	1%	1%
Adj. Flow (vph)	461	948	1002	30	22	342
Shared Lane Traffic (%)						
Lane Group Flow (vph)	461	948	1032	0	364	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		26	26		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	102.3%			ICU Level of Service G		
Analysis Period (min)	15					

Master Plan Project
7: N Decatur Rd/Briarcliff Rd & Driveway/Johnson Rd

Existing Conditions

6/4/2013













												
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Volume (vph)	35	439	19	66	628	494	338	62	21	60	115	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	250		150	150		0	0		0
Storage Lanes	1		0	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt		0.994				0.850		0.985			0.979	
Flt Protected	0.950			0.950			0.950	0.970			0.986	
Satd. Flow (prot)	1770	3518	0	1787	3574	1599	1681	1691	0	0	1816	0
Flt Permitted	0.309			0.334			0.950	0.970			0.986	
Satd. Flow (perm)	576	3518	0	628	3574	1599	1681	1691	0	0	1816	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3				426		4			5	
Link Speed (mph)		35			35			35			30	
Link Distance (ft)		2785			821			1807			309	
Travel Time (s)		54.3			16.0			35.2			7.0	
Peak Hour Factor	0.75	0.75	0.75	0.96	0.96	0.96	0.87	0.87	0.87	0.71	0.71	0.71
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	47	585	25	69	654	515	389	71	24	85	162	46
Shared Lane Traffic (%)							38%					
Lane Group Flow (vph)	47	610	0	69	654	515	241	243	0	0	293	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA	Perm	Split	NA		Split	NA	
Protected Phases		2			6		4	4		3	3	
Permitted Phases	2			6		6						
Minimum Split (s)	22.5	22.5		22.5	22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	68.0	68.0		68.0	68.0	68.0	50.0	50.0		32.0	32.0	
Total Split (%)	45.3%	45.3%		45.3%	45.3%	45.3%	33.3%	33.3%		21.3%	21.3%	
Maximum Green (s)	61.5	61.5		61.5	61.5	61.5	43.5	43.5		25.5	25.5	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.5	2.5		2.5	2.5	2.5	2.5	2.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	6.5	6.5		6.5	6.5	6.5	6.5	6.5			6.5	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Act Effect Green (s)	61.5	61.5		61.5	61.5	61.5	43.5	43.5			25.5	
Actuated g/C Ratio	0.41	0.41		0.41	0.41	0.41	0.29	0.29			0.17	
v/c Ratio	0.20	0.42		0.27	0.45	0.57	0.49	0.49			0.94	
Control Delay	27.9	25.5		38.2	39.6	16.7	48.3	47.5			97.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Delay	27.9	25.5		38.2	39.6	16.7	48.3	47.5			97.3	

PM Peak Hour

Synchro 8 Report
Page 6

Master Plan Project
7: N Decatur Rd/Briarcliff Rd & Driveway/Johnson Rd

Existing Conditions
6/4/2013

												
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
LOS	C	C		D	D	B	D	D			F	
Approach Delay		25.7			30.0			47.9			97.3	
Approach LOS		C			C			D			F	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 38 (25%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 70

Control Type: Pretimed

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 39.6





Intersection LOS: D

Intersection Capacity Utilization 64.7%

ICU Level of Service C

Analysis Period (min) 15




















Splits and Phases: 7: N Decatur Rd/Briarcliff Rd & Driveway/Johnson Rd

 ø2 (R)	 ø3	 ø4
68 s	32 s	50 s
 ø6 (R)		
68 s		

Master Plan Project
8: Briarcliff Rd & Clifton Rd/Driveway

Existing Conditions

6/4/2013

												
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Volume (vph)	0	634	257	404	912	0	0	3	0	305	0	505
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	14	11	10	12	12	12	12	12	12
Storage Length (ft)	316		0	150		0	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor											1.00	0.98
Frt			0.850									0.850
Flt Protected				0.950							0.950	
Satd. Flow (prot)	0	3421	1531	1906	3455	0	0	1900	0	0	1787	1599
Flt Permitted				0.223							0.756	
Satd. Flow (perm)	0	3421	1531	447	3455	0	0	1900	0	0	1418	1561
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			298									478
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		821			312			355			1189	
Travel Time (s)		16.0			6.1			6.9			23.2	
Confl. Peds. (#/hr)									3	3		13
Peak Hour Factor	0.79	0.79	0.79	0.96	0.96	0.96	0.92	0.92	0.92	0.89	0.89	0.89
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	1%	1%	1%
Parking (#/hr)									0			
Adj. Flow (vph)	0	803	325	421	950	0	0	3	0	343	0	567
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	803	325	421	950	0	0	3	0	0	343	567
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		14			14			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.92	1.04	1.09	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												













PM Peak Hour

Synchro 8 Report
Page 8

Master Plan Project
8: Briarcliff Rd & Clifton Rd/Driveway

Existing Conditions

6/4/2013

												
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases		6		5	2			4			8	
Permitted Phases	6	6	6	2	2		4			8		8
Detector Phase	6	6	6	5	2		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	4.0	10.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	23.0	23.0	23.0	10.0	23.0		22.3	22.3		22.3	22.3	22.3
Total Split (s)	55.0	55.0	55.0	40.0	95.0		55.0	55.0		55.0	55.0	55.0
Total Split (%)	36.7%	36.7%	36.7%	26.7%	63.3%		36.7%	36.7%		36.7%	36.7%	36.7%
Maximum Green (s)	48.0	48.0	48.0	34.5	88.0		48.7	48.7		48.7	48.7	48.7
Yellow Time (s)	4.5	4.5	4.5	3.0	4.5		3.8	3.8		3.8	3.8	3.8
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	2.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0			0.0			0.0	0.0
Total Lost Time (s)		7.0	7.0	5.5	7.0			6.3			6.3	6.3
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?	Yes	Yes	Yes	Yes								
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max	None	C-Max		None	None		None	None	None
Act Effect Green (s)		63.7	63.7	96.2	94.7			42.0			42.0	42.0
Actuated g/C Ratio		0.42	0.42	0.64	0.63			0.28			0.28	0.28
v/c Ratio		0.55	0.40	0.79	0.44			0.01			0.86	0.73
Control Delay		44.0	12.3	27.9	8.6			34.7			72.1	13.3
Queue Delay		0.0	0.0	0.0	0.0			0.0			0.0	0.0
Total Delay		44.0	12.3	27.9	8.6			34.7			72.1	13.3
LOS		D	B	C	A			C			E	B
Approach Delay		34.9			14.6			34.7			35.5	
Approach LOS		C			B			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 8 (5%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 26.9

Intersection LOS: C

Intersection Capacity Utilization 83.2%

ICU Level of Service E

Analysis Period (min) 15










Splits and Phases: 8: Briarcliff Rd & Clifton Rd/Driveway



Master Plan Project
11: Houston Mill Road & Rollins Way

Existing Conditions
























6/4/2013

						
Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Volume (vph)	650	1	55	26	0	208
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected				0.967		
Satd. Flow (prot)	3574	0	0	3293	1644	0
Flt Permitted				0.967		
Satd. Flow (perm)	3574	0	0	3293	1644	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	351			484	251	
Travel Time (s)	8.0			11.0	5.7	
Peak Hour Factor	0.86	0.86	0.74	0.74	0.79	0.79
Heavy Vehicles (%)	1%	1%	6%	6%	0%	0%
Adj. Flow (vph)	756	1	74	35	0	263
Shared Lane Traffic (%)						
Lane Group Flow (vph)	757	0	0	109	263	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	44.2%			ICU Level of Service A		
Analysis Period (min)	15					

Master Plan Project
13: Houston Mill Road/Houston Mill Rd & Clifton Rd

Existing Conditions

6/4/2013

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	232	713	59	52	511	299	227	352	299	198	35	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	480		0	227		52	0		0	100		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	1.00		0.99		0.94	1.00		0.96	0.99	0.99	
Frt		0.989				0.850			0.850		0.891	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3527	0	1770	3539	1583	1787	1881	1599	1805	1670	0
Flt Permitted	0.306			0.258			0.586			0.148		
Satd. Flow (perm)	570	3527	0	478	3539	1482	1099	1881	1539	279	1670	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				176			249		94	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		625			693			484			1787	
Travel Time (s)		12.2			13.5			11.0			40.6	
Confl. Peds. (#/hr)	22		21	21		22	5		20	20		5
Peak Hour Factor	0.91	0.91	0.91	0.97	0.97	0.97	0.89	0.89	0.89	0.88	0.88	0.88
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	1%	1%	1%	0%	0%	0%
Adj. Flow (vph)	255	784	65	54	527	308	255	396	336	225	40	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	255	849	0	54	527	308	255	396	336	225	145	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	













PM Peak Hour

Synchro 8 Report
Page 11

Master Plan Project
13: Houston Mill Road/Houston Mill Rd & Clifton Rd

Existing Conditions

6/4/2013

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6		6	4		4	8		
Detector Phase	5	2		1	6	6	7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	15.0	21.5		12.0	21.5	21.5	15.0	21.5	21.5	15.0	12.0	
Total Split (s)	30.0	52.0		16.0	38.0	38.0	26.0	36.0	36.0	26.0	36.0	
Total Split (%)	23.1%	40.0%		12.3%	29.2%	29.2%	20.0%	27.7%	27.7%	20.0%	27.7%	
Maximum Green (s)	24.0	46.0		10.0	32.0	32.0	20.0	30.0	30.0	20.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	
Act Effect Green (s)	65.1	53.8		50.0	42.4	42.4	47.7	30.4	30.4	46.1	29.6	
Actuated g/C Ratio	0.50	0.41		0.38	0.33	0.33	0.37	0.23	0.23	0.35	0.23	
v/c Ratio	0.58	0.58		0.21	0.46	0.51	0.52	0.90	0.61	0.77	0.32	
Control Delay	25.5	32.9		33.6	54.3	37.0	30.2	72.8	17.1	47.2	17.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	25.5	32.9		33.6	54.3	37.0	30.2	72.8	17.1	47.2	17.9	
LOS	C	C		C	D	D	C	E	B	D	B	
Approach Delay		31.2			47.1			42.8			35.7	
Approach LOS		C			D			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 42 (32%), Referenced to phase 2:SETL and 6:NWTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 39.3

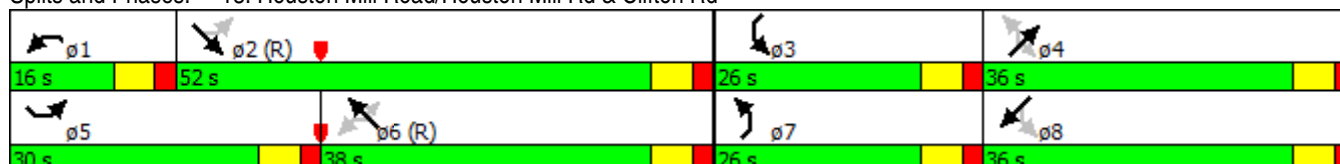
Intersection LOS: D










Intersection Capacity Utilization 76.5%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 13: Houston Mill Road/Houston Mill Rd & Clifton Rd























						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	870	0	0	830	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	3471	0	0	3471	1863	0
Flt Permitted						
Satd. Flow (perm)	3471	0	0	3471	1863	0
Link Speed (mph)	35			35	30	
Link Distance (ft)	618			147	312	
Travel Time (s)	12.0			2.9	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	4%	4%	4%	2%	2%
Adj. Flow (vph)	946	0	0	902	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	946	0	0	902	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilization 27.4%				ICU Level of Service A		
Analysis Period (min) 15						

Master Plan Project
18: Clifton Rd & Asbury Cir/Haygood Dr

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	194	77	48	35	45	205	28	537	12	327	935	202
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	12	10	10	12	9	9	10
Storage Length (ft)	100		0	280		0	135		0	110		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00	0.98		0.93	0.99		0.99	1.00		0.99	0.99	
Frt		0.943			0.877			0.997			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1620	1574	0	1652	1507	0	1620	3225	0	1593	3058	0
Flt Permitted	0.182			0.668			0.186			0.308		
Satd. Flow (perm)	310	1574	0	1083	1507	0	314	3225	0	512	3058	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			164			2			23	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		671			1358			1232			781	
Travel Time (s)		15.3			30.9			24.0			15.2	
Confl. Peds. (#/hr)	2		63	63		2	43		24	24		43
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.93	0.93	0.93	0.95	0.95	0.95
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Adj. Flow (vph)	216	86	53	39	50	228	30	577	13	344	984	213
Shared Lane Traffic (%)												
Lane Group Flow (vph)	216	139	0	39	278	0	30	590	0	344	1197	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.00	1.09	1.09	1.00	1.14	1.14	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	


PM Peak Hour

Synchro 8 Report
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Master Plan Project
18: Clifton Rd & Asbury Cir/Haygood Dr

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4			8		1	6		5	2	
Permitted Phases	4			8			6			2		
Detector Phase	7	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.5	21.8		21.8	21.8		9.2	21.1		9.0	21.1	
Total Split (s)	25.0	61.0		36.0	36.0		14.0	40.0		29.0	55.0	
Total Split (%)	19.2%	46.9%		27.7%	27.7%		10.8%	30.8%		22.3%	42.3%	
Maximum Green (s)	19.5	55.2		30.2	30.2		8.8	34.9		24.0	49.9	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.1		3.0	3.1	
All-Red Time (s)	2.5	2.8		2.8	2.8		2.2	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.8		5.8	5.8		5.2	5.1		5.0	5.1	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effect Green (s)	40.9	40.6		16.5	16.5		58.7	52.2		78.6	71.1	
Actuated g/C Ratio	0.31	0.31		0.13	0.13		0.45	0.40		0.60	0.55	
v/c Ratio	0.76	0.27		0.28	0.83		0.14	0.46		0.71	0.71	
Control Delay	51.1	25.2		52.8	42.1		20.9	31.8		33.9	20.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	51.1	25.2		52.8	42.1		20.9	31.8		33.9	20.3	
LOS	D	C		D	D		C	C		C	C	
Approach Delay		40.9			43.4			31.3			23.4	
Approach LOS		D			D			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 72 (55%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 29.5

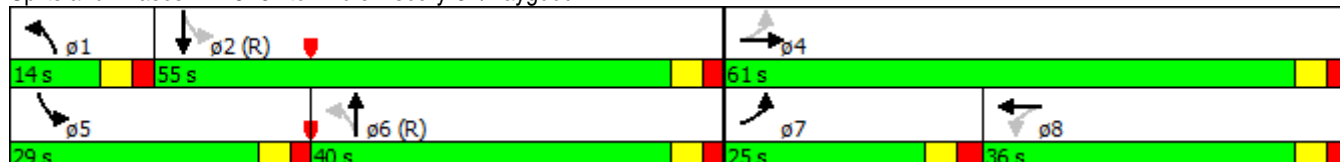
Intersection LOS: C

Intersection Capacity Utilization 80.2%

ICU Level of Service D

Analysis Period (min) 15



















Splits and Phases: 18: Clifton Rd & Asbury Cir/Haygood Dr



Master Plan Project
19: Driveway/Gatewood Rd & Clifton Rd

Existing Conditions

6/4/2013

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	28	1172	14	13	821	91	10	3	33	132	1	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor											0.99	
Frt		0.998			0.985			0.903			0.970	
Flt Protected	0.950			0.950				0.989			0.963	
Satd. Flow (prot)	1770	3532	0	1752	3452	0	0	1664	0	0	1730	0
Flt Permitted	0.242			0.173				0.929			0.770	
Satd. Flow (perm)	451	3532	0	319	3452	0	0	1563	0	0	1379	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			16			43			10	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		693			781			193			374	
Travel Time (s)		13.5			15.2			4.4			8.5	
Confl. Peds. (#/hr)										3		10
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.77	0.77	0.77	0.85	0.85	0.85
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	30	1260	15	14	902	100	13	4	43	155	1	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	30	1275	0	14	1002	0	0	60	0	0	200	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	













PM Peak Hour

Synchro 8 Report
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Master Plan Project
19: Driveway/Gatewood Rd & Clifton Rd

Existing Conditions

6/4/2013

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	10.6	21.6		10.6	21.6		10.0	10.0		10.0	10.0	
Total Split (s)	16.0	82.0		16.0	82.0		32.0	32.0		32.0	32.0	
Total Split (%)	12.3%	63.1%		12.3%	63.1%		24.6%	24.6%		24.6%	24.6%	
Maximum Green (s)	10.4	76.4		10.4	76.4		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.6	3.6		3.6	3.6		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	5.6	5.6		5.6	5.6			6.0			6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effect Green (s)	94.3	91.7		92.7	89.1			22.0			22.0	
Actuated g/C Ratio	0.73	0.71		0.71	0.69			0.17			0.17	
v/c Ratio	0.08	0.51		0.05	0.42			0.20			0.83	
Control Delay	2.4	10.7		4.9	6.7			19.4			75.9	
Queue Delay	0.0	0.4		0.0	0.0			0.0			0.0	
Total Delay	2.4	11.2		4.9	6.7			19.4			75.9	
LOS	A	B		A	A			B			E	
Approach Delay		11.0			6.7			19.4			75.9	
Approach LOS		B			A			B			E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 63 (48%), Referenced to phase 2:NWTL and 6:SETL, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 14.5







Intersection LOS: B

Intersection Capacity Utilization 59.0%

ICU Level of Service B

Analysis Period (min) 15




















Splits and Phases: 19: Driveway/Gatewood Rd & Clifton Rd

		
ø1	ø2 (R)	ø4
16 s	82 s	32 s
		
ø5	ø6 (R)	ø8
16 s	82 s	32 s

Master Plan Project
21: CDC Entrance/Driveway & Clifton Rd

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	678	39	49	751	9	387	1	201	15	1	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	13	12	12	12	11	12	12	12	12	12
Storage Length (ft)	260		0	500		0	0		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	0.95	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor		1.00					1.00	1.00			0.99	
Frt		0.992			0.998			0.985	0.850		0.921	
Flt Protected		0.999		0.950			0.950	0.957			0.981	
Satd. Flow (prot)	0	3467	0	1787	3567	0	1641	1614	1519	0	1652	0
Flt Permitted		0.932		0.301			0.790	0.729			0.605	
Satd. Flow (perm)	0	3234	0	566	3567	0	1361	1226	1519	0	1019	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			2			4	220		28	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1743			618			453			209	
Travel Time (s)		34.0			12.0			10.3			4.8	
Confl. Peds. (#/hr)	20		20				2					2
Peak Hour Factor	0.94	0.94	0.94	0.89	0.89	0.89	0.82	0.82	0.82	0.81	0.81	0.81
Heavy Vehicles (%)	3%	3%	3%	1%	1%	1%	1%	1%	1%	3%	3%	3%
Adj. Flow (vph)	14	721	41	55	844	10	472	1	245	19	1	28
Shared Lane Traffic (%)							47%		10%			
Lane Group Flow (vph)	0	776	0	55	854	0	250	248	220	0	48	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.96	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	













PM Peak Hour

Synchro 8 Report
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Master Plan Project
21: CDC Entrance/Driveway & Clifton Rd

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	D.Pm	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2		1	6			8			3	
Permitted Phases	6			6			8		8	3		
Detector Phase	6	2		1	6		8	8	8	3	3	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	21.5	21.5		10.0	21.5		18.0	18.0	18.0	18.0	18.0	
Total Split (s)	100.0	82.0		18.0	100.0		30.0	30.0	30.0	30.0	30.0	
Total Split (%)	76.9%	63.1%		13.8%	76.9%		23.1%	23.1%	23.1%	23.1%	23.1%	
Maximum Green (s)	94.0	76.0		12.0	94.0		24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)		6.0		6.0	6.0		6.0	6.0	6.0		6.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	C-Max	C-Max		None	C-Max		None	None	None	Max	Max	
Act Effect Green (s)		83.7		94.0	94.0		24.0	24.0	24.0		24.0	
Actuated g/C Ratio		0.64		0.72	0.72		0.18	0.18	0.18		0.18	
v/c Ratio		0.37		0.12	0.33		1.00	1.08	0.48		0.23	
Control Delay		11.4		5.7	6.9		108.7	131.9	9.5		26.6	
Queue Delay		0.0		0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay		11.4		5.7	6.9		108.7	131.9	9.5		26.6	
LOS		B		A	A		F	F	A		C	
Approach Delay		11.4			6.9			86.3			26.6	
Approach LOS		B			A			F			C	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 45 (35%), Referenced to phase 2:EBT and 6:EBWB, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.08

Intersection Signal Delay: 32.0

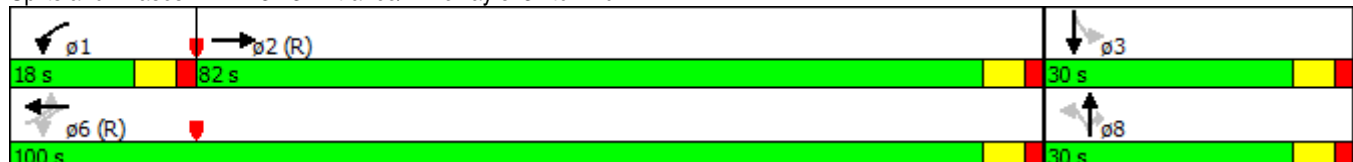
Intersection LOS: C

Intersection Capacity Utilization 70.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 21: CDC Entrance/Driveway & Clifton Rd



Master Plan Project
24: Clifton Rd & Emory Conf Cntr

Existing Conditions

6/4/2013



Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Volume (vph)	29	775	847	44	109	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	10	8	10	10
Storage Length (ft)	132			110	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1652	3421	3336	1247	1685	1507
Flt Permitted	0.265				0.950	
Satd. Flow (perm)	461	3421	3336	1247	1685	1507
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				30		207
Link Speed (mph)		35	35		30	
Link Distance (ft)		531	625		322	
Travel Time (s)		10.3	12.2		7.3	
Peak Hour Factor	0.94	0.94	0.93	0.93	0.68	0.68
Heavy Vehicles (%)	2%	2%	1%	1%	0%	0%
Parking (#/hr)				0		
Adj. Flow (vph)	31	824	911	47	160	207
Shared Lane Traffic (%)						
Lane Group Flow (vph)	31	824	911	47	160	207
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.09	1.04	1.09	1.37	1.09	1.09
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	NA	Perm

PM Peak Hour

Synchro 8 Report
Page 20



Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Protected Phases	1	6	2		8	
Permitted Phases	6			2		8
Detector Phase	1	6	2	2	8	8
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.5	21.5	21.5	21.5	21.5	21.5
Total Split (s)	15.0	76.0	61.0	61.0	44.0	44.0
Total Split (%)	12.5%	63.3%	50.8%	50.8%	36.7%	36.7%
Maximum Green (s)	9.5	70.5	55.5	55.5	38.5	38.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag		Lag	
Lead-Lag Optimize?	Yes		Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	C-Max	None	None
Act Effect Green (s)	92.2	92.2	85.0	85.0	16.8	16.8
Actuated g/C Ratio	0.77	0.77	0.71	0.71	0.14	0.14
v/c Ratio	0.07	0.31	0.39	0.05	0.68	0.53
Control Delay	4.6	5.0	8.9	4.4	62.9	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.6	5.0	8.9	4.4	62.9	11.0
LOS	A	A	A	A	E	B
Approach Delay		5.0	8.7		33.6	
Approach LOS		A	A		C	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NWT and 6:SETL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 11.4

Intersection LOS: B

Intersection Capacity Utilization 41.3%

ICU Level of Service A

Analysis Period (min) 15




















Splits and Phases: 24: Clifton Rd & Emory Conf Cntr



Master Plan Project
28: Clifton Road/Clifton Rd & N Decatur Rd

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	163	396	34	0	445	336	5	100	24	410	442	351
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	8	12	12	12	11	11	10	10	10	10
Storage Length (ft)	150		0	0		0	0		0	200		0
Storage Lanes	1		0	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	0.95	0.95	0.95	0.97	1.00	1.00
Frt		0.988				0.850		0.972			0.934	
Flt Protected	0.950							0.998		0.950		
Satd. Flow (prot)	1770	3497	0	0	1845	1568	0	3319	0	3173	1608	0
Flt Permitted	0.111							0.921		0.950		
Satd. Flow (perm)	207	3497	0	0	1845	1568	0	3063	0	3173	1608	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8				295		19			46	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		1444			1181			1262			1113	
Travel Time (s)		28.1			23.0			24.6			21.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.83	0.83	0.83	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	3%	3%	3%
Adj. Flow (vph)	181	440	38	0	494	373	6	120	29	441	475	377
Shared Lane Traffic (%)												
Lane Group Flow (vph)	181	478	0	0	494	373	0	155	0	441	852	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.20	1.00	1.00	1.00	1.04	1.04	1.09	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA		Prot	NA	
Protected Phases	1	6			2			8		7	4	

PM Peak Hour

Synchro 8 Report
Page 22

Master Plan Project
28: Clifton Road/Clifton Rd & N Decatur Rd

Existing Conditions

6/4/2013

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	6			2		2	8					
Detector Phase	1	6		2	2	2	8	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	3.5	3.5		4.0	4.0	
Minimum Split (s)	9.1	20.0		20.0	20.0	20.0	10.0	10.0		10.5	20.0	
Total Split (s)	21.0	55.0		34.0	34.0	34.0	34.0	34.0		41.0	75.0	
Total Split (%)	16.2%	42.3%		26.2%	26.2%	26.2%	26.2%	26.2%		31.5%	57.7%	
Maximum Green (s)	15.9	49.5		28.5	28.5	28.5	27.5	27.5		34.5	68.5	
Yellow Time (s)	3.0	3.5		3.5	3.5	3.5	3.0	3.0		3.0	3.0	
All-Red Time (s)	2.1	2.0		2.0	2.0	2.0	3.5	3.5		3.5	3.5	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.1	5.5			5.5	5.5		6.5		6.5	6.5	
Lead/Lag	Lead			Lag			Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes			Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		C-Max	C-Max	C-Max	None	None		None	None	
Act Effect Green (s)	50.2	49.8			30.9	30.9		38.4		23.4	68.2	
Actuated g/C Ratio	0.39	0.38			0.24	0.24		0.30		0.18	0.52	
v/c Ratio	0.74	0.36			1.13	0.62		0.17		0.77	0.98	
Control Delay	48.5	29.2			127.3	15.5		31.4		55.8	43.7	
Queue Delay	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay	48.5	29.2			127.3	15.5		31.4		55.8	43.7	
LOS	D	C			F	B		C		E	D	
Approach Delay		34.5			79.2			31.4			47.8	
Approach LOS		C			E			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 62 (48%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.13

Intersection Signal Delay: 53.2

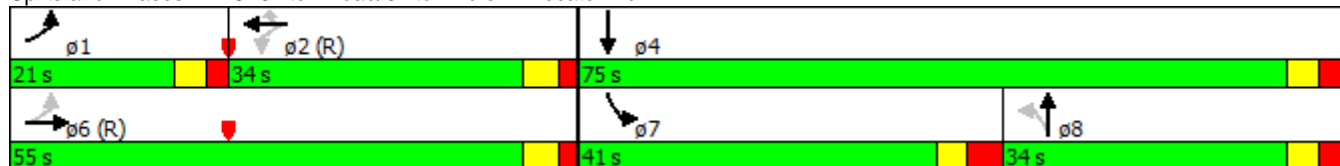
Intersection LOS: D

Intersection Capacity Utilization 103.8%

ICU Level of Service G

Analysis Period (min) 15























Splits and Phases: 28: Clifton Road/Clifton Rd & N Decatur Rd



Master Plan Project
29: Briarcliff Rd & Summit Pointe Way

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	56	0	43	12	0	10	5	839	22	11	855	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	175		0	150		150
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.950			0.950		0.950			0.950		
Satd. Flow (prot)	0	1805	1615	0	1805	1615	1770	1863	1583	1770	1863	1583
Flt Permitted		0.749			0.641		0.252			0.275		
Satd. Flow (perm)	0	1423	1615	0	1218	1615	469	1863	1583	512	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			61			51			51			51
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		226			168			634			1325	
Travel Time (s)		5.1			3.8			12.4			25.8	
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.98	0.98	0.98	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	79	0	61	13	0	11	5	856	22	12	929	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	79	61	0	13	11	5	856	22	12	929	8
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6

PM Peak Hour

Synchro 8 Report
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Master Plan Project
29: Briarcliff Rd & Summit Pointe Way

Existing Conditions

6/4/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	20.0	20.0	20.0	20.0	20.0	20.0	9.0	20.0	20.0	9.0	20.0	20.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	15.0	100.0	100.0	15.0	100.0	100.0
Total Split (%)	23.3%	23.3%	23.3%	23.3%	23.3%	23.3%	10.0%	66.7%	66.7%	10.0%	66.7%	66.7%
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	10.0	95.0	95.0	10.0	95.0	95.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)		13.7	13.7		13.7	13.7	124.2	122.0	122.0	125.4	124.2	124.2
Actuated g/C Ratio		0.09	0.09		0.09	0.09	0.83	0.81	0.81	0.84	0.83	0.83
v/c Ratio		0.61	0.30		0.12	0.06	0.01	0.57	0.02	0.03	0.60	0.01
Control Delay		84.4	17.2		62.3	0.6	2.0	9.7	0.0	5.0	22.0	0.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		84.4	17.2		62.3	0.6	2.0	9.8	0.0	5.0	22.0	0.0
LOS		F	B		E	A	A	A	A	A	C	A
Approach Delay		55.1			34.0			9.5			21.6	
Approach LOS		E			C			A			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 124 (83%), Referenced to phase 2:NETL and 6:SWTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 18.7

Intersection LOS: B

Intersection Capacity Utilization 64.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 29: Briarcliff Rd & Summit Pointe Way





Lane Group	EBL	EBR	NEL	NET	SWT	SWR	ø4
Lane Configurations							
Volume (vph)	625	34	18	652	553	216	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	10	10	11	11	11	10	
Storage Length (ft)	100	0	0			0	
Storage Lanes	1	0	0			0	
Taper Length (ft)	25		25				
Lane Util. Factor	0.97	0.95	0.95	0.95	0.95	0.95	
Ped Bike Factor	0.99			1.00	0.99		
Frt	0.992				0.958		
Flt Protected	0.955			0.999			
Satd. Flow (prot)	3227	0	0	3385	3254	0	
Flt Permitted	0.955			0.915			
Satd. Flow (perm)	3198	0	0	3100	3254	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)	4				37		
Link Speed (mph)	30			35	35		
Link Distance (ft)	1021			1039	599		
Travel Time (s)	23.2			20.2	11.7		
Confl. Peds. (#/hr)	2		3			3	
Peak Hour Factor	0.93	0.93	0.89	0.89	0.94	0.94	
Heavy Vehicles (%)	1%	1%	3%	3%	2%	2%	
Adj. Flow (vph)	672	37	20	733	588	230	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	709	0	0	753	818	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Left	Left	Right	
Median Width(ft)	20			0	0		
Link Offset(ft)	0			0	0		
Crosswalk Width(ft)	16			16	16		
Two way Left Turn Lane							
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.09	
Turning Speed (mph)	15	9	15			9	
Number of Detectors	1		1	2	2		
Detector Template	Left		Left	Thru	Thru		
Leading Detector (ft)	20		20	100	100		
Trailing Detector (ft)	0		0	0	0		
Detector 1 Position(ft)	0		0	0	0		
Detector 1 Size(ft)	20		20	6	6		
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0		
Detector 1 Queue (s)	0.0		0.0	0.0	0.0		
Detector 1 Delay (s)	0.0		0.0	0.0	0.0		
Detector 2 Position(ft)				94	94		
Detector 2 Size(ft)				6	6		
Detector 2 Type				Cl+Ex	Cl+Ex		
Detector 2 Channel							
Detector 2 Extend (s)				0.0	0.0		



Lane Group	EBL	EBR	NEL	NET	SWT	SWR	ø4
Turn Type	NA		pm+pt	NA	NA		
Protected Phases	3		5	2	6		4
Permitted Phases			2				
Detector Phase	3		5	2	6		
Switch Phase							
Minimum Initial (s)	4.0		4.0	4.0	4.0		4.0
Minimum Split (s)	20.0		10.0	21.5	21.5		20.0
Total Split (s)	62.0		20.0	65.0	45.0		23.0
Total Split (%)	41.3%		13.3%	43.3%	30.0%		15%
Maximum Green (s)	58.0		14.0	59.0	39.0		19.0
Yellow Time (s)	3.5		4.0	4.0	4.0		3.5
All-Red Time (s)	0.5		2.0	2.0	2.0		0.5
Lost Time Adjust (s)	0.0			0.0	0.0		
Total Lost Time (s)	4.0			6.0	6.0		
Lead/Lag	Lead		Lead		Lag		Lag
Lead-Lag Optimize?	Yes		Yes		Yes		Yes
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0
Recall Mode	None		None	C-Max	C-Max		None
Walk Time (s)	5.0						5.0
Flash Dont Walk (s)	11.0						11.0
Pedestrian Calls (#/hr)	0						0
Act Effect Green (s)	39.4			100.6	100.6		
Actuated g/C Ratio	0.26			0.67	0.67		
v/c Ratio	0.83			0.36	0.37		
Control Delay	60.9			12.0	8.5		
Queue Delay	0.0			0.0	0.0		
Total Delay	60.9			12.0	8.5		
LOS	E			B	A		
Approach Delay	60.9			12.0	8.5		
Approach LOS	E			B	A		

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 55 (37%), Referenced to phase 2:NETL and 6:SWT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 26.0
Intersection Capacity Utilization 58.2%
Analysis Period (min) 15

Intersection LOS: C
ICU Level of Service B

















Splits and Phases: 33: N Decatur Rd & Haygood Dr

ø2 (R)	ø3	ø4
65 s	62 s	23 s
ø5	ø6 (R)	
20 s	45 s	

Master Plan Project
37: Houston Mill Rd & Mason Mill Road

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	11	9	128	18	114	9	594	395	98	184	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	12	12	12	11	12	12	11	12
Storage Length (ft)	0		0	0		0	0		0	20		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.963			0.941			0.947			0.997	
Flt Protected		0.980			0.976						0.983	
Satd. Flow (prot)	0	1972	0	0	1728	0	0	1722	0	0	1800	0
Flt Permitted		0.849			0.824			0.996			0.496	
Satd. Flow (perm)	0	1709	0	0	1459	0	0	1715	0	0	908	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			40			47			2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		487			1319			1719			1513	
Travel Time (s)		11.1			30.0			39.1			34.4	
Peak Hour Factor	0.82	0.82	0.82	0.92	0.92	0.92	0.82	0.82	0.82	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Adj. Flow (vph)	16	13	11	139	20	124	11	724	482	114	214	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	40	0	0	283	0	0	1217	0	0	336	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.04	1.00
Turning Speed (mph)	16		10	16		10	16		10	16		10
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	













PM Peak Hour

Synchro 8 Report
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Master Plan Project
37: Houston Mill Rd & Mason Mill Road

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	10.0	10.0		10.0	10.0		10.5	10.5		10.5	10.5	
Total Split (s)	45.0	45.0		45.0	45.0		65.0	65.0		65.0	65.0	
Total Split (%)	40.9%	40.9%		40.9%	40.9%		59.1%	59.1%		59.1%	59.1%	
Maximum Green (s)	39.5	39.5		39.5	39.5		59.5	59.5		59.5	59.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.5			5.5			5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Act Effect Green (s)		20.6			20.6			59.8			59.8	
Actuated g/C Ratio		0.23			0.23			0.65			0.65	
v/c Ratio		0.10			0.79			1.07			0.57	
Control Delay		21.4			44.1			66.5			15.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		21.4			44.1			66.5			15.0	
LOS		C			D			E			B	
Approach Delay		21.4			44.1			66.5			15.0	
Approach LOS		C			D			E			B	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 91.5

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 53.0

Intersection LOS: D












Intersection Capacity Utilization 106.5%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 37: Houston Mill Rd & Mason Mill Road



						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	735	126	177	516	130	593
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	13	12	11	8
Storage Length (ft)		0	300		200	0
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		1.00		1.00	0.99
Frt	0.982					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1823	0	1847	1881	1745	1400
Flt Permitted			0.118		0.950	
Satd. Flow (perm)	1823	0	229	1881	1742	1382
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	7					538
Link Speed (mph)	35			35	30	
Link Distance (ft)	1440			922	1382	
Travel Time (s)	28.1			18.0	31.4	
Confl. Peds. (#/hr)		4	4		1	1
Peak Hour Factor	0.88	1.00	0.87	0.87	0.89	0.89
Heavy Vehicles (%)	2%	2%	1%	1%	0%	0%
Adj. Flow (vph)	835	126	203	593	146	666
Shared Lane Traffic (%)						
Lane Group Flow (vph)	961	0	203	593	146	666
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	13			13	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	0.96	1.00	1.04	1.20
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	1
Detector Template	Thru		Left	Thru	Left	Right
Leading Detector (ft)	100		20	100	20	20
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	6		20	6	20	20
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Type	NA		pm+pt	NA	NA	Free
Protected Phases	6		5	2	8	
Permitted Phases			2			Free
Detector Phase	6		5	2	8	
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	
Minimum Split (s)	10.0		10.0	10.0	10.0	
Total Split (s)	81.0		19.0	100.0	50.0	
Total Split (%)	54.0%		12.7%	66.7%	33.3%	
Maximum Green (s)	75.0		13.0	94.0	44.0	
Yellow Time (s)	4.0		4.0	4.0	4.0	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	6.0		6.0	6.0	6.0	
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	C-Max		None	C-Max	None	
Act Effect Green (s)	95.1		120.0	120.0	18.0	150.0
Actuated g/C Ratio	0.63		0.80	0.80	0.12	1.00
v/c Ratio	0.83		0.53	0.39	0.70	0.48
Control Delay	35.1		21.8	6.6	80.3	1.2
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	35.1		21.8	6.6	80.3	1.2
LOS	D		C	A	F	A
Approach Delay	35.1			10.5	15.4	
Approach LOS	D			B	B	

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 85 (57%), Referenced to phase 2:WBTL and 6:EBT, Start of Green
 Natural Cycle: 75
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 21.2
 Intersection Capacity Utilization 78.4%
 Analysis Period (min) 15

Intersection LOS: C
 ICU Level of Service D

Splits and Phases: 42: Houston Mill Rd & Lavista Rd



Master Plan Project
47: Clifton Rd & Old Briarcliff Rd/Towers Cir

Existing Conditions

6/4/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (vph)	16	24	78	59	35	50	237	802	79	13	522	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	13	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor		0.99			1.00			1.00			1.00	
Frt		0.911			0.953			0.989			0.998	
Flt Protected		0.993			0.980			0.990			0.999	
Satd. Flow (prot)	0	1662	0	0	1815	0	0	3425	0	0	3564	0
Flt Permitted		0.923			0.668			0.674			0.898	
Satd. Flow (perm)	0	1544	0	0	1234	0	0	2332	0	0	3203	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		65			17			18			3	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		348			341			1743			1189	
Travel Time (s)		7.9			7.8			34.0			23.2	
Confl. Peds. (#/hr)			5	5					12	12		
Peak Hour Factor	0.91	0.91	0.91	0.86	0.86	0.86	0.78	0.78	0.78	0.86	0.86	0.86
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	3%	3%	3%	1%	1%	1%
Adj. Flow (vph)	18	26	86	69	41	58	304	1028	101	15	607	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	130	0	0	168	0	0	1433	0	0	631	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		

PM Peak Hour

Synchro 8 Report
Page 32

Master Plan Project
47: Clifton Rd & Old Briarcliff Rd/Towers Cir

Existing Conditions

6/4/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		21.5	21.5		21.5	21.5	
Total Split (s)	26.0	26.0		26.0	26.0		104.0	104.0		104.0	104.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		80.0%	80.0%		80.0%	80.0%	
Maximum Green (s)	21.0	21.0		21.0	21.0		99.0	99.0		99.0	99.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effect Green (s)		18.8			18.8			101.2			101.2	
Actuated g/C Ratio		0.14			0.14			0.78			0.78	
v/c Ratio		0.47			0.88			0.79			0.25	
Control Delay		31.2			87.5			20.3			4.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		31.2			87.5			20.3			4.4	
LOS		C			F			C			A	
Approach Delay		31.2			87.5			20.3			4.4	
Approach LOS		C			F			C			A	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 80 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 21.4

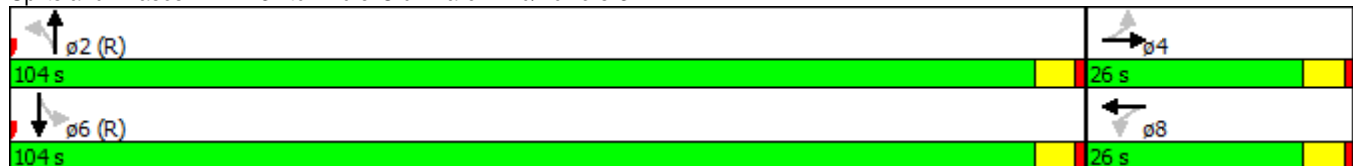
Intersection LOS: C

Intersection Capacity Utilization 74.0%

ICU Level of Service D

Analysis Period (min) 15



















Splits and Phases: 47: Clifton Rd & Old Briarcliff Rd/Towers Cir



Master Plan Project
50: Houston Mill Road & CDC Driveway/Garage

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	297	0	36	0	0	52	0	257	0	19	10	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	8	12	10	12	12	12	12	16	12	12	12	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.865							0.850
Flt Protected	0.950										0.968	
Satd. Flow (prot)	1564	0	1507	0	1644	0	0	2153	0	0	1839	1561
Flt Permitted	0.950										0.968	
Satd. Flow (perm)	1564	0	1507	0	1644	0	0	2153	0	0	1839	1561
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		289			282			193			351	
Travel Time (s)		6.6			6.4			4.4			8.0	
Peak Hour Factor	0.83	0.83	0.83	0.59	0.59	0.59	0.84	0.84	0.84	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	358	0	43	0	0	88	0	306	0	22	11	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	358	0	43	0	88	0	0	306	0	0	33	7
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		8			8			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.20	1.00	1.09	1.00	1.00	1.00	1.00	0.85	1.00	1.00	1.00	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	47.1%						ICU Level of Service A					
Analysis Period (min)	15											



Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations		↑↑	↑↑		↑↑	
Volume (vph)	5	899	843	13	5	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.998		0.897	
Flt Protected					0.988	
Satd. Flow (prot)	0	3505	3532	0	1651	0
Flt Permitted					0.988	
Satd. Flow (perm)	0	3505	3532	0	1651	0
Link Speed (mph)		35	35		30	
Link Distance (ft)		147	531		214	
Travel Time (s)		2.9	10.3		4.9	
Confl. Peds. (#/hr)				13		
Peak Hour Factor	0.93	0.93	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Adj. Flow (vph)	5	967	916	14	5	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	972	930	0	21	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		10	10		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

























Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	38.3%
Analysis Period (min)	15
	ICU Level of Service A

Master Plan Project
56: Clairmont Rd & N Druid Hills Rd

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	63	1118	405	90	606	174	578	880	160	422	690	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		300	300		400	300		0	150		0
Storage Lanes	1		1	1		1	2		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	0.95	0.97	0.95	0.95
Frt			0.850			0.850		0.977			0.990	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3574	1599	1770	3539	1583	3467	3492	0	3467	3539	0
Flt Permitted	0.336			0.073			0.950			0.950		
Satd. Flow (perm)	632	3574	1599	136	3539	1583	3467	3492	0	3467	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			328			187		14			4	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		2251			1808			2219			2954	
Travel Time (s)		43.9			35.2			43.2			57.5	
Peak Hour Factor	0.98	0.98	0.98	0.93	0.93	0.93	0.91	0.91	0.91	0.93	0.93	0.93
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	64	1141	413	97	652	187	635	967	176	454	742	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	1141	413	97	652	187	635	1143	0	454	793	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						













PM Peak Hour

Synchro 8 Report
Page 36

Master Plan Project
56: Clairmont Rd & N Druid Hills Rd

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6		5	2	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	10.0	20.0		10.0	20.0	
Total Split (s)	37.0	58.0	58.0	27.0	48.0	48.0	22.0	50.0		15.0	43.0	
Total Split (%)	24.7%	38.7%	38.7%	18.0%	32.0%	32.0%	14.7%	33.3%		10.0%	28.7%	
Maximum Green (s)	33.0	52.0	52.0	23.0	42.0	42.0	16.0	44.0		9.0	37.0	
Yellow Time (s)	3.5	4.0	4.0	3.5	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Act Effect Green (s)	67.4	57.2	57.2	74.6	62.8	62.8	22.1	44.0		15.1	37.0	
Actuated g/C Ratio	0.45	0.38	0.38	0.50	0.42	0.42	0.15	0.29		0.10	0.25	
v/c Ratio	0.18	0.84	0.51	0.50	0.44	0.24	1.24	1.11		1.30	0.91	
Control Delay	7.1	35.8	17.4	30.0	32.0	4.0	162.5	108.5		180.0	87.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	7.1	35.8	17.4	30.0	32.0	4.0	162.5	108.5		180.0	87.3	
LOS	A	D	B	C	C	A	F	F		F	F	
Approach Delay		30.0			26.2			127.8			121.0	
Approach LOS		C			C			F			F	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 13 (9%), Referenced to phase 2:SBT and 6:NBT, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.30

Intersection Signal Delay: 80.9

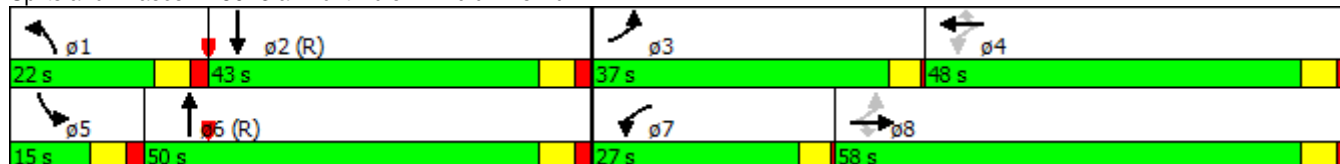
Intersection LOS: F

Intersection Capacity Utilization 95.7%

ICU Level of Service F

Analysis Period (min) 15





















Splits and Phases: 56: Clairmont Rd & N Druid Hills Rd



Master Plan Project
57: Clairmont Rd & Lavista Rd

Existing Conditions

6/4/2013













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	228	529	15	157	319	72	19	797	44	214	1117	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.996			0.972			0.992			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1874	0	1787	1829	0	1787	3546	0	1787	3496	0
Flt Permitted	0.252			0.113			0.075			0.136		
Satd. Flow (perm)	474	1874	0	213	1829	0	141	3546	0	256	3496	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			8			4			15	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		2445			1250			2954			1012	
Travel Time (s)		47.6			24.4			57.5			19.7	
Peak Hour Factor	0.97	0.97	0.97	0.90	0.90	0.90	0.94	0.94	0.94	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	235	545	15	174	354	80	20	848	47	233	1214	214
Shared Lane Traffic (%)												
Lane Group Flow (vph)	235	560	0	174	434	0	20	895	0	233	1428	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8			6			2		
Minimum Split (s)	8.0	20.0		8.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	18.0	57.0		18.0	57.0		18.0	57.0		18.0	57.0	
Total Split (%)	12.0%	38.0%		12.0%	38.0%		12.0%	38.0%		12.0%	38.0%	
Maximum Green (s)	14.0	53.0		14.0	53.0		14.0	53.0		14.0	53.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Act Effect Green (s)	67.0	53.0		67.0	53.0		67.0	53.0		67.0	53.0	
Actuated g/C Ratio	0.45	0.35		0.45	0.35		0.45	0.35		0.45	0.35	
v/c Ratio	0.70	0.85		0.72	0.67		0.09	0.71		0.91	1.15	
Control Delay	54.1	47.6		43.9	46.2		44.2	77.7		64.9	119.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	54.1	47.6		43.9	46.2		44.2	77.7		64.9	119.3	

PM Peak Hour

Synchro 8 Report
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Master Plan Project
57: Clairmont Rd & Lavista Rd

Existing Conditions
6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	D		D	D		D	E		E	F	
Approach Delay		49.5			45.6			76.9			111.7	
Approach LOS		D			D			E			F	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 2 (1%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 90

Control Type: Pretimed

Maximum v/c Ratio: 1.15

Intersection Signal Delay: 81.2









Intersection LOS: F

Intersection Capacity Utilization 91.3%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 57: Clairmont Rd & Lavista Rd

			
ø1	ø2 (R)	ø3	ø4
18 s	57 s	18 s	57 s
			
ø5	ø6 (R)	ø7	ø8
18 s	57 s	18 s	57 s

Master Plan Project
61: Clairmont Rd & Mason Mill Rd

Existing Conditions

6/4/2013



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	306	189	163	1393	1109	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	200			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Frt	0.948				0.988	
Flt Protected	0.970		0.950			
Satd. Flow (prot)	1730	0	1787	3574	3531	0
Flt Permitted	0.970		0.071			
Satd. Flow (perm)	1730	0	134	3574	3531	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	23				8	
Link Speed (mph)	30			35	35	
Link Distance (ft)	2023			816	2219	
Travel Time (s)	46.0			15.9	43.2	
Peak Hour Factor	0.88	0.88	0.94	0.94	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	348	215	173	1482	1205	109
Shared Lane Traffic (%)						
Lane Group Flow (vph)	563	0	173	1482	1314	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1		1	2	2	
Detector Template	Left		Left	Thru	Thru	
Leading Detector (ft)	20		20	100	100	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	20		20	6	6	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	NA		pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases			2			

PM Peak Hour

Synchro 8 Report
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Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	
Minimum Split (s)	20.0		9.0	20.0	20.0	
Total Split (s)	57.0		27.0	93.0	66.0	
Total Split (%)	38.0%		18.0%	62.0%	44.0%	
Maximum Green (s)	52.0		22.0	88.0	61.0	
Yellow Time (s)	4.0		4.0	4.0	4.0	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	5.0		5.0	5.0	5.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	None		None	C-Max	C-Max	
Act Effect Green (s)	49.9		90.1	90.1	70.2	
Actuated g/C Ratio	0.33		0.60	0.60	0.47	
v/c Ratio	0.95		0.71	0.69	0.79	
Control Delay	73.9		48.1	18.5	28.2	
Queue Delay	6.6		0.0	0.2	0.2	
Total Delay	80.5		48.1	18.7	28.4	
LOS	F		D	B	C	
Approach Delay	80.5			21.7	28.4	
Approach LOS	F			C	C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 57 (38%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 33.6

Intersection LOS: C

Intersection Capacity Utilization 83.9%

ICU Level of Service E

Analysis Period (min) 15






















Splits and Phases: 61: Clairmont Rd & Mason Mill Rd



Master Plan Project
62: Clairmont Rd & Southern Ln/Driveway

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	294	0	130	4	0	9	19	1117	3	8	1149	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	0		0	200		200	100		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.850			0.905				0.850		0.993	
Flt Protected	0.950				0.985		0.950			0.950		
Satd. Flow (prot)	1805	1615	0	0	1694	0	1787	3574	1599	1787	3549	0
Flt Permitted	0.744				0.929		0.086			0.166		
Satd. Flow (perm)	1414	1615	0	0	1597	0	162	3574	1599	312	3549	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		96			80				22			4
Link Speed (mph)		30			30			35				35
Link Distance (ft)		776			344			1210				816
Travel Time (s)		17.6			7.8			23.6				15.9
Peak Hour Factor	0.70	0.70	0.70	0.65	0.65	0.65	0.89	0.89	0.89	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	420	0	186	6	0	14	21	1255	3	9	1277	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	420	186	0	0	20	0	21	1255	3	9	1340	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1		2
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20		100
Trailing Detector (ft)	0	0		0	0		0	0	0	0		0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0		0
Detector 1 Size(ft)	20	6		20	6		20	6	20	20		6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	Perm		NA
Protected Phases		4			8		5	2				6
Permitted Phases	4			8			2		2	6		













PM Peak Hour

Synchro 8 Report
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Master Plan Project
62: Clairmont Rd & Southern Ln/Driveway

Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8		5	2	2	6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		11.0	20.0	20.0	20.0	20.0	
Total Split (s)	66.0	66.0		66.0	66.0		12.0	84.0	84.0	72.0	72.0	
Total Split (%)	44.0%	44.0%		44.0%	44.0%		8.0%	56.0%	56.0%	48.0%	48.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		5.0	77.0	77.0	65.0	65.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0			6.0		7.0	7.0	7.0	7.0	7.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max	C-Max	C-Max	C-Max	
Act Effect Green (s)	50.5	50.5			50.5		86.5	86.5	86.5	78.7	78.7	
Actuated g/C Ratio	0.34	0.34			0.34		0.58	0.58	0.58	0.52	0.52	
v/c Ratio	0.88	0.31			0.03		0.13	0.61	0.00	0.06	0.72	
Control Delay	67.0	17.0			0.1		21.7	31.9	3.3	10.4	19.3	
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.7	
Total Delay	67.0	17.0			0.1		21.7	31.9	3.3	10.4	20.0	
LOS	E	B			A		C	C	A	B	B	
Approach Delay		51.6			0.1			31.7			19.9	
Approach LOS		D			A			C			B	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 89 (59%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 30.3

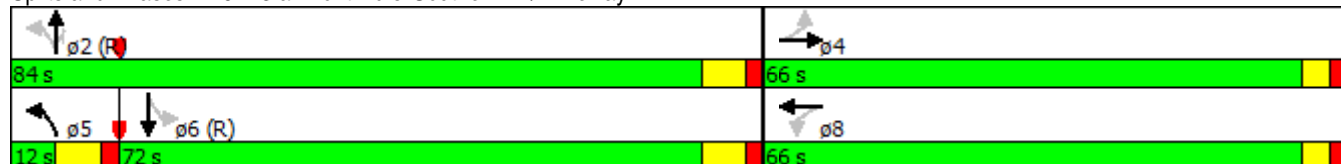
Intersection LOS: C























Intersection Capacity Utilization 67.4%













ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 62: Clairmont Rd & Southern Ln/Driveway



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	133	2	274	30	0	22	26	968	28	51	1221	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		150	100		0	250		0	250		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.850			0.996			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1583	0	1787	3560	0	1787	3571	0
Flt Permitted	0.740			0.756			0.161			0.218		
Satd. Flow (perm)	1378	1863	1583	1408	1583	0	303	3560	0	410	3571	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			151		200			4			1	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		648			575			1977			1210	
Travel Time (s)		14.7			13.1			38.5			23.6	
Peak Hour Factor	0.59	0.59	0.59	0.81	0.81	0.81	0.91	0.91	0.91	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	225	3	464	37	0	27	29	1064	31	54	1299	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	225	3	464	37	27	0	29	1095	0	54	1310	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Minimum Split (s)	19.0	19.0	19.0	19.0	19.0		10.0	20.0		10.0	20.0	
Total Split (s)	29.0	29.0	29.0	29.0	29.0		13.0	108.0		13.0	108.0	
Total Split (%)	19.3%	19.3%	19.3%	19.3%	19.3%		8.7%	72.0%		8.7%	72.0%	
Maximum Green (s)	23.0	23.0	23.0	23.0	23.0		7.0	102.0		7.0	102.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Act Effect Green (s)	23.0	23.0	23.0	23.0	23.0		109.0	102.0		109.0	102.0	
Actuated g/C Ratio	0.15	0.15	0.15	0.15	0.15		0.73	0.68		0.73	0.68	
v/c Ratio	1.07	0.01	1.25	0.17	0.07		0.10	0.45		0.15	0.54	
Control Delay	139.0	54.0	168.1	57.7	0.3		2.3	12.5		9.3	32.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	139.0	54.0	168.1	57.7	0.3		2.3	12.5		9.3	32.2	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	D	F	E	A		A	B		A	C	
Approach Delay		158.1			33.5			12.2			31.3	
Approach LOS		F			C			B			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 5 (3%), Referenced to phase 6:SBTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 1.25

Intersection Signal Delay: 51.8







Intersection LOS: D

Intersection Capacity Utilization 69.4%

ICU Level of Service C

Analysis Period (min) 15






















Splits and Phases: 65: Clairmont Rd/Clairmont Rd & Veterans Affairs Med Cen/Clairmont Lk

 $\phi 1$	 $\phi 2$	 $\phi 4$
13 s	108 s	29 s
 $\phi 5$	 $\phi 6 (R)$	 $\phi 8$
13 s	108 s	29 s

Master Plan Project
70: Clairmont Rd & N Decatur Rd













Existing Conditions

6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	245	835	245	157	495	52	134	609	61	139	740	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	300		0	150		300	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.966			0.986				0.850		0.974	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3453	0	1787	3524	0	1770	3539	1583	1770	3447	0
Flt Permitted	0.291			0.144			0.119			0.140		
Satd. Flow (perm)	547	3453	0	271	3524	0	222	3539	1583	261	3447	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			8				178		17	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		2078			1739			966			539	
Travel Time (s)		40.5			33.9			18.8			10.5	
Peak Hour Factor	0.97	0.97	0.97	0.95	0.95	0.95	0.98	0.98	0.98	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	253	861	253	165	521	55	137	621	62	148	787	168
Shared Lane Traffic (%)												
Lane Group Flow (vph)	253	1114	0	165	576	0	137	621	62	148	955	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6		6	2		
Minimum Split (s)	9.5	21.5		9.5	21.5		9.5	21.5	21.5	9.5	21.5	
Total Split (s)	27.0	71.0		15.0	59.0		13.0	39.0	39.0	25.0	51.0	
Total Split (%)	18.0%	47.3%		10.0%	39.3%		8.7%	26.0%	26.0%	16.7%	34.0%	
Maximum Green (s)	21.5	65.5		9.5	53.5		7.5	33.5	33.5	19.5	45.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5		5.5	5.5		5.5	5.5	5.5	5.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Act Effect Green (s)	80.5	65.5		63.0	53.5		41.0	33.5	33.5	58.5	45.5	
Actuated g/C Ratio	0.54	0.44		0.42	0.36		0.27	0.22	0.22	0.39	0.30	
v/c Ratio	0.54	0.73		0.79	0.46		0.99	0.79	0.13	0.50	0.90	
Control Delay	30.6	41.7		48.4	38.0		111.7	63.0	0.5	47.0	71.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	30.6	41.7		48.4	38.0		111.7	63.0	0.5	47.0	71.4	

PM Peak Hour

Synchro 8 Report
Page 46

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	D		D	D		F	E	A	D	E	
Approach Delay		39.7			40.3			66.4			68.1	
Approach LOS		D			D			E			E	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 52 (35%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 90

Control Type: Pretimed

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 53.0

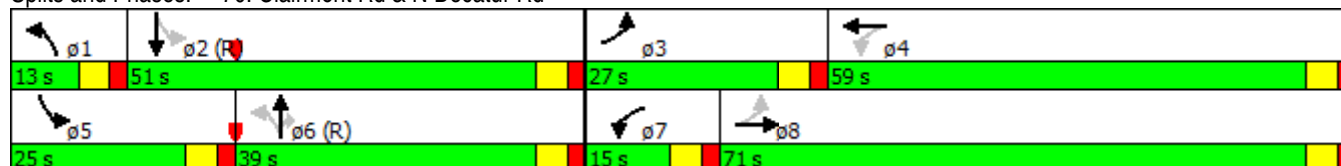
Intersection LOS: D

Intersection Capacity Utilization 90.9%

ICU Level of Service E

Analysis Period (min) 15





















Splits and Phases: 70: Clairmont Rd & N Decatur Rd



Master Plan Project
74: Briarcliff Rd & N Decatur Rd

Existing Conditions

6/4/2013













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	441	62	226	248	81	58	450	139	92	562	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	300		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.981			0.963			0.965			0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1845	0	1787	1812	0	1752	1780	0	1787	1870	0
Flt Permitted	0.380			0.078			0.105			0.107		
Satd. Flow (perm)	715	1845	0	147	1812	0	194	1780	0	201	1870	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			12			12			2	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		942			3025			1172			2474	
Travel Time (s)		18.4			58.9			22.8			48.2	
Peak Hour Factor	0.94	0.94	0.94	0.91	0.91	0.91	0.95	0.95	0.95	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	1%	1%	1%
Adj. Flow (vph)	38	469	66	248	273	89	61	474	146	98	598	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	535	0	248	362	0	61	620	0	98	622	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	10.0	22.0		10.0	22.0		10.0	22.0		10.0	22.0	
Total Split (s)	15.0	52.0		20.0	57.0		15.0	63.0		15.0	63.0	
Total Split (%)	10.0%	34.7%		13.3%	38.0%		10.0%	42.0%		10.0%	42.0%	
Maximum Green (s)	9.0	46.0		14.0	51.0		9.0	57.0		9.0	57.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Act Effect Green (s)	55.0	46.0		65.0	51.0		66.0	57.0		66.0	57.0	
Actuated g/C Ratio	0.37	0.31		0.43	0.34		0.44	0.38		0.44	0.38	
v/c Ratio	0.12	0.94		1.15	0.58		0.34	0.91		0.54	0.87	
Control Delay	25.4	75.6		144.1	43.7		26.6	61.6		59.2	58.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	25.4	75.6		144.1	43.7		26.6	61.6		59.2	58.0	

PM Peak Hour

Synchro 8 Report
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Master Plan Project
74: Briarcliff Rd & N Decatur Rd

Existing Conditions
6/4/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	E		F	D		C	E		E	E	
Approach Delay		72.3			84.5			58.4			58.2	
Approach LOS		E			F			E			E	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 40 (27%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 100

Control Type: Pretimed

Maximum v/c Ratio: 1.15

Intersection Signal Delay: 67.6









Intersection LOS: E

Intersection Capacity Utilization 96.7%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 74: Briarcliff Rd & N Decatur Rd

 $\phi 1$	 $\phi 2 (R)$	 $\phi 3$	 $\phi 4$
20 s	52 s	15 s	63 s
 $\phi 5$	 $\phi 6$	 $\phi 7$	 $\phi 8$
15 s	57 s	15 s	63 s

PROJECT: CDC Roybal Campus EIS
LOCATION: Briarcliff Road @ N Decatur Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Briarcliff Road (NB)			Briarcliff Road (SB)			Decatur Road (EB)			Decatur Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME	
			L	T	R	L	T	R	L	T	R	L	T	R				
7:15 AM to 7:30 AM	Auto Truck Bus		12 0 0	142 4 0	55 1 0	8 1 0	62 4 0	8 0 0	3 0 0	61 0 0	11 0 0	45 3 0	66 0 0	15 0 0	501	2,105		
7:30 AM to 7:45 AM	Auto Truck Bus		0 0 0	115 6 0	42 2 0	21 0 0	71 1 0	7 0 0	22 0 0	75 1 0	9 0 0	34 3 0	76 3 0	21 0 0	509			
7:45 AM to 8:00 AM	Auto Truck Bus	1	5 0 0	133 3 0	39 3 0	13 0 0	84 0 0	6 0 0	8 0 0	74 2 0	16 0 0	51 5 0	63 0 0	25 0 0	530			
8:00 AM to 8:15 AM	Auto Truck Bus		6 1 0	104 4 0	30 6 0	20 0 0	98 3 0	7 0 0	21 0 0	89 2 0	18 0 0	57 1 0	82 1 0	15 0 0	565			
8:15 AM to 8:30 AM	Auto Truck Bus		15 1 0	102 5 0	34 3 0	24 1 0	108 1 0	10 0 0	18 0 0	79 0 0	20 0 0	48 5 0	79 3 0	31 0 0	587			
8:30 AM to 8:45 AM	Auto Truck Bus		11 0 0	102 8 0	42 4 0	7 0 0	101 2 0	12 0 0	13 0 0	56 3 0	11 0 0	42 2 0	114 0 0	17 0 0	547			
8:45 AM to 9:00 AM	Auto Truck Bus		8 0 0	100 5 0	40 3 0	17 0 0	112 1 0	4 0 0	16 0 0	76 0 0	11 0 0	39 4 0	102 0 0	23 0 0	561			
9:00 AM to 9:15 AM	Auto Truck Bus		5 0 0	119 3 0	60 0 0	17 0 0	99 2 0	11 0 0	6 0 0	54 2 0	4 1 0	46 3 0	76 1 0	29 0 0	538			
Peak Hour Volume (PHV)			39	461	161	65	397	35	60	305	65	211	342	88	2,229	2,260		
PHV (by approach)			661			497			430			641						
Peak Hour Factor (PHF)			0.90			0.86			0.83			0.92						
Total Autos			623			490			423			624						
Total Trucks			38			7			7			17						
Total Buses			0			0			0			0						
% Auto			94.3%			98.6%			98.4%			97.3%						
% Heavy Vehicles (Trucks & Buses)			5.7%			1.4%			1.6%			2.7%						

PROJECT: CDC Roybal Campus EIS
LOCATION: Briarcliff Road @ Clifton Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Briarcliff Road (NB)			Briarcliff Road (SB)			Clifton Road (EB)			Clifton Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
7:15 AM to 7:30 AM	Auto Truck Bus		0 0 0	124 4 0	56 3 0	220 4 0	109 3 0	0 0 0	0 0 0	0 0 0	0 0 0	35 0 0	0 0 0	76 3 0	637	2,945			
7:30 AM to 7:45 AM	Auto Truck Bus		0 0 0	147 6 0	82 7 0	224 6 0	114 1 0	0 0 0	0 0 0	0 0 0	0 0 0	42 0 0	0 0 0	98 4 0	731				
7:45 AM to 8:00 AM	Auto Truck Bus	1	0 0 0	164 3 0	85 1 0	216 5 0	123 4 0	0 0 0	0 0 0	0 0 0	0 0 0	70 0 0	0 0 0	99 6 0	776				
8:00 AM to 8:15 AM	Auto Truck Bus		0 0 0	141 5 0	91 3 0	210 3 0	158 4 0	0 0 0	0 0 0	0 0 0	0 0 0	69 4 0	0 0 0	106 7 0	801				
8:15 AM to 8:30 AM	Auto Truck Bus		0 0 0	167 3 0	78 3 0	205 5 0	137 5 0	0 0 0	0 0 0	0 0 0	0 0 0	60 2 0	0 0 0	87 3 0	755				
8:30 AM to 8:45 AM	Auto Truck Bus		0 0 0	151 3 0	80 3 0	199 5 0	179 8 0	0 0 0	0 0 0	0 0 0	0 0 0	66 2 0	0 0 0	82 4 0	782				
8:45 AM to 9:00 AM	Auto Truck Bus		0 0 0	143 3 0	80 3 0	176 7 0	198 6 0	0 0 0	0 0 0	0 0 0	0 0 0	68 1 0	0 0 0	54 5 0	744				
9:00 AM to 9:15 AM	Auto Truck Bus		0 0 0	140 2 0	67 2 0	164 2 0	179 5 0	0 0 0	0 0 0	0 0 0	0 0 0	53 2 0	0 0 0	83 8 0	707				
Peak Hour Volume (PHV)			0	637	344	848	618	0	0	0	0	273	0	394	3,114				
PHV (by approach)			981			1,466			0			667							
Peak Hour Factor (PHF)			0.97			0.94			#DIV/0!			0.90							
Total Autos			957			1,427			0			639							
Total Trucks			24			39			0			28							
Total Buses			0			0			0			0							
% Auto			97.6%			97.3%			#DIV/0!			95.8%							
% Heavy Vehicles (Trucks & Buses)			2.4%			2.7%			#DIV/0!			4.2%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Briarcliff Road @ LaVista Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Briarcliff Road (NB)			Briarcliff Road (SB)			LaVista Road (EB)			LaVista Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R			
7:15 AM to 7:30 AM	Auto Truck Bus		22 2 0	115 5 0	17 1 0	5 1 0	185 5 0	10 0 0	7 0 0	30 3 0	40 2 0	42 0 0	84 0 0	7 2 0	585	2,559	
7:30 AM to 7:45 AM	Auto Truck Bus		19 2 0	151 4 0	26 2 0	1 1 0	120 5 0	3 0 0	15 0 0	45 1 0	73 1 0	57 1 0	114 1 0	13 0 0	655		
7:45 AM to 8:00 AM	Auto Truck Bus	1	22 1 0	172 6 0	28 2 0	3 0 0	146 4 0	9 1 0	12 0 0	33 1 0	54 1 0	48 0 0	111 1 0	13 0 0	668		
8:00 AM to 8:15 AM	Auto Truck Bus		19 2 0	141 7 0	17 0 0	5 0 0	148 7 0	7 0 0	13 0 0	46 0 0	44 0 0	44 1 0	127 2 0	21 0 0	651		
8:15 AM to 8:30 AM	Auto Truck Bus		22 2 0	165 6 0	22 1 0	3 1 0	128 8 0	5 1 0	10 0 0	44 2 0	60 4 0	45 1 0	122 5 0	15 0 0	672		
8:30 AM to 8:45 AM	Auto Truck Bus		22 1 0	142 2 0	18 2 0	3 0 0	133 9 0	2 1 0	19 1 0	56 0 0	45 5 0	54 0 0	113 2 0	15 1 0	646		
8:45 AM to 9:00 AM	Auto Truck Bus		16 1 0	131 4 0	21 4 0	5 0 0	183 4 0	9 0 0	23 0 0	55 1 0	32 1 0	60 1 0	106 5 0	12 0 0	674		
9:00 AM to 9:15 AM	Auto Truck Bus		16 1 0	133 8 0	25 1 0	7 2 0	164 6 0	5 0 0	13 0 0	38 2 0	47 1 0	50 1 0	129 1 0	11 1 0	662		
Peak Hour Volume (PHV)			91	641	90	15	583	26	55	182	213	193	483	65	2,637	2,654	
PHV (by approach)			822			624			450			741					
Peak Hour Factor (PHF)			0.89			0.93			0.89			0.95					
Total Autos			790			592			436			728					
Total Trucks			32			32			14			13					
Total Buses			0			0			0			0					
% Auto			96.1%			94.9%			96.9%			98.2%					
% Heavy Vehicles (Trucks & Buses)			3.9%			5.1%			3.1%			1.8%					

PROJECT: CDC Roybal Campus EIS
LOCATION: North Druid Hills Road @ LaVista Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	N Druid Hill Road (NB)			N Druid Hill Road (SB)			LaVista Road (EB)			LaVista Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
7:15 AM to 7:30 AM	Auto Truck Bus		75 1 0	310 5 0	3 0 0	14 1 0	176 2 0	28 2 0	23 0 0	35 1 0	19 1 0	9 0 0	138 3 0	18 1 0	865	4,162			
7:30 AM to 7:45 AM	Auto Truck Bus		124 0 0	360 12 0	4 0 0	15 0 0	176 9 0	54 0 0	26 2 0	35 1 0	51 0 0	14 1 0	150 4 0	29 0 0	1,067				
7:45 AM to 8:00 AM	Auto Truck Bus	1	110 1 0	385 4 0	5 1 0	21 1 0	195 8 0	68 0 0	25 0 0	56 1 0	52 2 0	12 0 0	174 1 0	25 1 0	1,148				
8:00 AM to 8:15 AM	Auto Truck Bus		107 4 0	351 4 0	4 0 0	15 0 0	183 5 0	48 0 0	33 0 0	53 0 0	54 1 0	28 0 0	166 3 0	20 3 0	1,082				
8:15 AM to 8:30 AM	Auto Truck Bus		116 2 0	336 5 0	2 0 0	18 1 0	177 2 0	32 2 0	30 0 0	72 0 0	54 1 0	20 1 0	168 2 0	28 1 0	1,070				
8:30 AM to 8:45 AM	Auto Truck Bus		117 0 0	356 6 0	7 0 0	25 1 0	158 8 0	44 1 0	28 3 0	50 1 0	59 1 0	21 0 0	185 3 0	21 0 0	1,095				
8:45 AM to 9:00 AM	Auto Truck Bus		122 4 0	325 11 0	7 0 0	17 0 0	137 1 0	44 0 0	26 0 0	50 1 0	57 1 0	24 0 0	117 3 0	26 0 0	973				
9:00 AM to 9:15 AM	Auto Truck Bus		94 1 0	231 14 0	9 1 0	18 1 0	144 5 0	28 0 0	32 1 0	54 3 0	44 5 0	20 0 0	133 1 0	27 1 0	867				
Peak Hour Volume (PHV)			457	1,447	19	82	736	195	119	233	224	82	702	99	4,395				
PHV (by approach)			1,923			1,013			576			883							
Peak Hour Factor (PHF)			0.95			0.86			0.92			0.96							
Total Autos			1,896			984			566			868							
Total Trucks			27			29			10			15							
Total Buses			0			0			0			0							
% Auto			98.6%			97.1%			98.3%			98.3%							
% Heavy Vehicles (Trucks & Buses)			1.4%			2.9%			1.7%			1.7%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Clairmont Road @ Mason Mill Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Clairmont Road (NB)			Clairmont Road (SB)			Mason Mill Road (EB)			Mason Mill Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R			
7:15 AM to 7:30 AM	Auto Truck Bus		11 0 0	226 3 0	0 0 0	0 0 0	359 3 0	59 0 0	10 0 0	0 0 0	23 0 0	0 0 0	0 0 0	0 0 0	694	3,179	
7:30 AM to 7:45 AM	Auto Truck Bus		17 0 0	236 4 0	0 0 0	0 0 0	407 5 0	65 2 0	14 0 0	0 0 0	19 1 0	0 0 0	0 0 0	0 0 0	770		
7:45 AM to 8:00 AM	Auto Truck Bus	1	46 0 0	253 5 0	0 0 0	0 0 0	430 7 0	61 1 0	18 1 0	0 0 0	19 0 0	0 0 0	0 0 0	0 0 0	841		
8:00 AM to 8:15 AM	Auto Truck Bus		36 0 0	296 3 0	0 0 0	0 0 0	414 6 0	85 1 0	16 0 0	0 0 0	17 0 0	0 0 0	0 0 0	0 0 0	874		
8:15 AM to 8:30 AM	Auto Truck Bus		41 0 0	332 7 0	0 0 0	0 0 0	386 5 0	81 0 0	21 0 0	0 0 0	21 0 0	0 0 0	0 0 0	0 0 0	894		
8:30 AM to 8:45 AM	Auto Truck Bus		36 0 0	283 10 0	0 0 0	0 0 0	336 4 0	61 1 0	25 1 0	0 0 0	28 0 0	0 0 0	0 0 0	0 0 0	785		
8:45 AM to 9:00 AM	Auto Truck Bus		28 0 0	273 4 0	0 0 0	0 0 0	362 3 0	87 2 0	12 0 0	0 0 0	23 2 0	0 0 0	0 0 0	0 0 0	796		
9:00 AM to 9:15 AM	Auto Truck Bus		30 0 0	233 5 0	0 0 0	0 0 0	293 6 0	58 0 0	22 0 0	0 0 0	18 0 0	0 0 0	0 0 0	0 0 0	665		
Peak Hour Volume (PHV)			159	1,189	0	0	1,588	291	82	0	85	0	0	0	3,394		
PHV (by approach)			1,348			1,879			167			0					
Peak Hour Factor (PHF)			0.89			0.93			0.77			#DIV/0!					
Total Autos			1,323			1,854			165			0					
Total Trucks			25			25			2			0					
Total Buses			0			0			0			0					
% Auto			98.1%			98.7%			98.8%			#DIV/0!					
% Heavy Vehicles (Trucks & Buses)			1.9%			1.3%			1.2%			#DIV/0!					

PROJECT: CDC Roybal Campus EIS
LOCATION: Houston Mill Road @ Mason Mill Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Houston Mill Road (NB)			Houston Mill Road (SB)			Mason Mill Road (EB)			Mason Mill Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
7:15 AM to 7:30 AM	Auto Truck Bus		0 0 0	24 0 0	15 1 0	6 1 0	149 2 0	1 0 0	2 0 0	4 0 0	2 0 0	73 1 0	0 0 0	14 0 0	295	1,151			
7:30 AM to 7:45 AM	Auto Truck Bus		0 0 0	28 1 0	15 0 0	12 0 0	114 1 0	1 0 0	4 0 0	4 0 0	4 0 0	71 2 0	0 0 0	25 0 0					
7:45 AM to 8:00 AM	Auto Truck Bus	1	1 0 0	34 1 0	27 1 0	6 0 0	120 0 0	0 0 0	9 0 0	3 0 0	3 0 0	77 0 0	0 1 0	22 0 0					
8:00 AM to 8:15 AM	Auto Truck Bus		0 0 0	45 0 0	21 0 0	5 0 0	98 0 0	0 0 0	4 0 0	2 0 0	4 0 0	75 0 0	1 0 0	14 0 0					
8:15 AM to 8:30 AM	Auto Truck Bus		0 0 0	35 1 0	17 0 0	3 0 0	100 0 0	0 0 0	5 0 0	2 0 0	4 0 0	80 0 0	2 0 0	18 0 0					
8:30 AM to 8:45 AM	Auto Truck Bus		1 0 0	23 0 0	10 0 0	7 0 0	95 0 0	0 0 0	3 0 0	8 0 0	2 0 0	92 0 0	1 0 0	15 0 0					
8:45 AM to 9:00 AM	Auto Truck Bus		0 0 0	28 0 0	20 1 0	5 0 0	111 1 0	0 0 0	3 1 0	4 0 0	7 0 0	75 0 0	0 0 0	18 0 0					
9:00 AM to 9:15 AM	Auto Truck Bus		2 0 0	29 0 0	15 0 0	4 0 0	97 0 0	0 0 0	2 0 0	2 0 0	1 0 0	92 0 0	4 0 0	9 0 0					
Peak Hour Volume (PHV)			2	139	76	21	413	0	21	15	13	324	5	69	1,098				
PHV (by approach)			217			434			49			398							
Peak Hour Factor (PHF)			0.82			0.86			0.82			0.92							
Total Autos			214			434			49			397							
Total Trucks			3			0			0			1							
Total Buses			0			0			0			0							
% Auto			98.6%			100.0%			100.0%			99.7%							
% Heavy Vehicles (Trucks & Buses)			1.4%			0.0%			0.0%			0.3%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Clairmont Road @ N Decatur Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Clairmont Road (NB)			Clairmont Road (SB)			North Decatur Road (EB)			North Decatur Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
7:15 AM to 7:30 AM	Auto Truck Bus		73 2 0	197 2 0	5 0 0	21 1 0	62 1 0	43 1 0	45 0 0	54 5 0	19 1 0	24 0 0	219 6 0	10 0 0	791	3,763			
7:30 AM to 7:45 AM	Auto Truck Bus		69 4 0	229 1 0	1 0 0	15 0 0	132 1 0	57 1 0	52 0 0	104 6 0	37 2 0	22 0 0	246 5 0	3 0 0	987				
7:45 AM to 8:00 AM	Auto Truck Bus	1	70 4 0	231 1 0	7 0 0	18 0 0	143 2 0	61 5 0	56 0 0	122 10 0	39 4 0	17 1 0	236 0 0	2 0 0	1,029				
8:00 AM to 8:15 AM	Auto Truck Bus		44 2 0	213 2 0	5 0 0	22 2 0	124 1 0	53 2 0	51 0 0	134 11 0	27 4 0	18 0 0	231 6 0	3 1 0	956				
8:15 AM to 8:30 AM	Auto Truck Bus		69 1 0	260 3 0	6 0 0	26 2 0	116 0 0	102 3 0	52 1 0	97 6 0	26 3 0	19 1 0	216 3 0	4 0 0	1,016				
8:30 AM to 8:45 AM	Auto Truck Bus		65 3 0	201 4 0	8 0 0	28 0 0	124 2 0	84 1 0	39 0 0	60 5 0	28 1 0	13 0 0	233 3 0	5 0 0	907				
8:45 AM to 9:00 AM	Auto Truck Bus		59 2 0	176 4 0	5 0 0	41 1 0	124 0 0	108 2 0	35 1 0	57 2 0	28 6 0	11 0 0	213 8 0	6 0 0	889				
9:00 AM to 9:15 AM	Auto Truck Bus		56 1 0	133 5 0	3 0 0	34 2 0	100 2 0	85 1 0	22 0 0	52 4 0	22 0 0	16 0 0	246 5 0	6 0 0	795				
Peak Hour Volume (PHV)			258	915	26	98	512	311	199	445	132	69	928	15	3,908				
PHV (by approach)			1,199			921			776			1,012							
Peak Hour Factor (PHF)			0.88			0.92			0.84			0.98							
Total Autos			1,179			901			731			997							
Total Trucks			20			20			45			15							
Total Buses			0			0			0			0							
% Auto			98.3%			97.8%			94.2%			98.5%							
% Heavy Vehicles (Trucks & Buses)			1.7%			2.2%			5.8%			1.5%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Haygood Drive @ N Decatur Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Haygood Drive (NB)			Haygood Drive (SB)			N Decatur Road (EB)			N Decatur Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
7:15 AM to 7:30 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	96 7 0	0 0 0	13 1 0	23 1 0	130 7 0	0 0 0	0 0 0	213 4 6	138 6 0	639	2,295			
7:30 AM to 7:45 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	42 0 0	0 0 0	4 0 0	9 0 0	70 7 0	0 0 0	0 0 0	251 8 0	155 2 0	548				
7:45 AM to 8:00 AM	Auto Truck Bus	1	0 0 0	0 0 0	0 0 0	39 0 0	0 0 0	2 0 0	3 0 0	84 6 0	0 0 0	0 0 0	263 6 0	175 0 0	578				
8:00 AM to 8:15 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	29 0 0	0 0 0	5 0 0	4 0 0	77 8 0	0 0 0	0 0 0	238 8 0	159 2 0	530				
8:15 AM to 8:30 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	34 1 0	0 0 0	8 0 0	4 0 0	78 2 0	0 0 0	0 0 0	251 5 0	155 5 0	543				
8:30 AM to 8:45 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	35 2 0	0 0 0	4 0 0	3 1 0	78 5 0	0 0 0	0 0 0	223 12 0	135 5 0	503				
8:45 AM to 9:00 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	32 2 0	0 0 0	3 0 0	4 0 0	86 3 0	0 0 0	0 0 0	211 11 0	90 1 0	443				
9:00 AM to 9:15 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	37 2 0	0 0 0	5 0 0	6 1 0	77 4 0	0 0 0	0 0 0	168 5 3	68 3 0	376				
Peak Hour Volume (PHV)			0	0	0	140	0	19	15	338	0	0	1,006	636	2,154				
PHV (by approach)			0			159			353			1,642							
Peak Hour Factor (PHF)			#DIV/0!			0.92			0.95			0.92							
Total Autos			0			156			331			1,599							
Total Trucks			0			3			22			43							
Total Buses			0			0			0			0							
% Auto			#DIV/0!			98.1%			93.8%			97.4%							
% Heavy Vehicles (Trucks & Buses)			#DIV/0!			1.9%			6.2%			2.6%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Clifton Road @ N Decatur Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Clifton Road (NB)			Clifton Road (SB)			N Decatur Road (EB)			N Decatur Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
7:15 AM to 7:30 AM	Auto Truck Bus		0 0 0	93 0 0	6 0 0	10 4 0	11 1 0	37 4 0	86 1 0	60 0 0	0 0 0	0 0 0	72 1 0	51 4 0	441	2,196			
7:30 AM to 7:45 AM	Auto Truck Bus		1 0 0	93 0 0	11 0 0	34 3 0	24 0 0	33 8 0	91 3 0	80 1 0	0 0 0	0 0 0	92 2 0	63 6 0	545				
7:45 AM to 8:00 AM	Auto Truck Bus	1	0 0 0	136 1 0	16 0 0	31 3 0	19 2 0	43 3 0	99 3 0	90 2 0	0 0 0	0 0 0	70 2 0	68 1 0	589				
8:00 AM to 8:15 AM	Auto Truck Bus		3 0 0	157 0 0	14 0 0	30 4 0	15 0 0	34 2 0	83 2 0	67 4 0	1 0 0	0 0 0	114 0 0	89 2 0	621				
8:15 AM to 8:30 AM	Auto Truck Bus		5 0 0	148 2 0	9 0 0	16 3 0	20 0 0	30 4 0	99 4 0	67 3 0	1 0 0	0 0 0	112 4 0	86 6 0	619				
8:30 AM to 8:45 AM	Auto Truck Bus		3 0 0	127 0 0	8 0 0	25 3 0	17 0 0	26 5 0	82 3 0	66 2 0	3 0 0	0 0 0	142 1 0	79 5 0	597				
8:45 AM to 9:00 AM	Auto Truck Bus		6 0 0	118 2 0	6 0 0	13 6 0	13 0 0	27 2 0	103 2 0	58 2 0	2 0 0	0 0 0	133 4 0	86 3 0	586				
9:00 AM to 9:15 AM	Auto Truck Bus		4 0 0	73 5 0	5 1 0	28 2 0	11 0 0	26 3 0	91 2 0	62 0 0	3 0 0	0 0 0	122 1 0	84 1 0	524				
Peak Hour Volume (PHV)			11	571	47	115	73	147	375	301	5	0	445	336	2,426				
PHV (by approach)			629			335			681			781							
Peak Hour Factor (PHF)			0.90			0.83			0.88			0.86							
Total Autos			626			306			658			760							
Total Trucks			3			29			23			21							
Total Buses			0			0			0			0							
% Auto			99.5%			91.3%			96.6%			97.3%							
% Heavy Vehicles (Trucks & Buses)			0.5%			8.7%			3.4%			2.7%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Clifton Road @ Haygood Drive
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Clifton Road (NB)			Clifton Road (SB)			Asbury Circle (EB)			Haygood Drive (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME	
			L	T	R	L	T	R	L	T	R	L	T	R				
7:15 AM to 7:30 AM	Auto Truck Bus		3 0 0	149 4 0	4 1 0	22 0 0	88 10 0	25 0 0	14 2 0	3 1 0	2 3 0	3 1 0	9 0 0	111 0 0	455	2,111		
7:30 AM to 7:45 AM	Auto Truck Bus		8 0 0	187 6 0	2 1 0	32 4 0	137 13 0	18 1 0	15 1 0	2 0 0	6 2 0	8 2 0	6 0 0	100 1 0	552			
7:45 AM to 8:00 AM	Auto Truck Bus	1	6 0 0	195 9 0	3 3 0	31 5 0	110 11 0	27 1 0	13 0 0	4 0 0	4 4 0	3 1 0	10 0 0	94 2 0	536			
8:00 AM to 8:15 AM	Auto Truck Bus		6 0 0	252 10 0	5 2 0	27 0 0	105 7 0	24 0 0	20 1 0	4 0 0	5 3 0	5 1 0	7 0 0	80 4 0	568			
8:15 AM to 8:30 AM	Auto Truck Bus		4 0 0	225 8 0	1 3 0	23 1 0	117 6 0	26 2 0	25 0 0	3 0 0	5 4 0	3 0 0	16 0 0	112 2 0	586			
8:30 AM to 8:45 AM	Auto Truck Bus		5 0 0	201 7 0	1 2 0	20 0 0	116 9 0	26 1 0	12 3 0	6 1 0	9 4 0	5 0 0	19 0 0	119 0 0	566			
8:45 AM to 9:00 AM	Auto Truck Bus		4 0 0	209 10 0	4 1 0	15 0 0	93 8 0	22 0 0	31 1 0	6 0 0	4 3 0	1 0 0	17 0 0	127 0 0	556			
9:00 AM to 9:15 AM	Auto Truck Bus		8 1 0	179 11 0	4 2 0	14 1 0	110 9 0	24 1 0	16 2 0	3 1 0	3 1 0	6 0 0	17 0 0	99 4 0	515			
Peak Hour Volume (PHV)			21	907	20	107	481	107	74	18	38	18	52	413	2,256			
PHV (by approach)			948			695			130			483						
Peak Hour Factor (PHF)			0.86			0.94			0.88			0.84						
Total Autos			904			652			110			473						
Total Trucks			44			43			20			10						
Total Buses			0			0			0			0						
% Auto			95.4%			93.8%			84.6%			97.9%						
% Heavy Vehicles (Trucks & Buses)			4.6%			6.2%			15.4%			2.1%						

PROJECT: CDC Roybal Campus EIS
LOCATION: Clairmont Road @ N Druid Hills Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Clairmont Road (NB)			Clairmont Road (SB)			N Druid Hill Road (EB)			N Druid Hill Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
7:15 AM to 7:30 AM	Auto Truck Bus		90 2 0	142 3 0	11 0 0	23 2 0	223 2 0	4 0 0	3 1 0	86 3 0	101 0 0	65 3 0	306 2 0	106 0 0	1,178	5,278			
7:30 AM to 7:45 AM	Auto Truck Bus		101 1 0	149 3 0	11 0 0	28 1 0	216 4 0	1 0 0	3 0 0	93 5 0	102 0 0	85 1 0	406 11 0	92 2 0	1,315				
7:45 AM to 8:00 AM	Auto Truck Bus	1	104 0 0	167 3 0	16 1 0	25 1 0	218 2 0	4 0 0	2 0 0	98 8 0	108 0 0	100 4 0	411 7 0	124 1 0	1,404				
8:00 AM to 8:15 AM	Auto Truck Bus		101 1 0	189 1 0	22 1 0	38 1 0	221 2 0	1 0 0	5 1 0	116 4 0	103 0 0	103 2 0	364 7 0	97 1 0	1,381				
8:15 AM to 8:30 AM	Auto Truck Bus		98 2 0	203 3 0	13 2 0	44 0 0	223 2 0	3 0 0	7 0 0	89 3 0	107 0 0	91 0 0	359 6 0	97 1 0	1,353				
8:30 AM to 8:45 AM	Auto Truck Bus		88 3 0	179 5 0	12 0 0	26 1 0	199 4 0	10 0 0	5 0 0	109 4 0	112 0 0	65 1 0	395 5 0	84 2 0	1,309				
8:45 AM to 9:00 AM	Auto Truck Bus		108 2 0	198 5 0	20 0 0	34 0 0	198 2 0	7 0 0	5 0 0	92 6 0	105 0 0	93 0 0	362 9 0	104 1 0	1,351				
9:00 AM to 9:15 AM	Auto Truck Bus		96 4 0	150 2 0	25 1 0	39 2 0	179 2 0	11 0 0	6 0 0	93 5 0	1 0 0	59 1 0	257 13 0	76 1 0	1,023				
Peak Hour Volume (PHV)			397	750	67	136	871	18	20	431	430	366	1,554	407	5,447				
PHV (by approach)			1,214			1,025			881			2,327							
Peak Hour Factor (PHF)			0.95			0.94			0.96			0.90							
Total Autos			1,192			1,012			861			2,290							
Total Trucks			22			13			20			37							
Total Buses			0			0			0			0							
% Auto			98.2%			98.7%			97.7%			98.4%							
% Heavy Vehicles (Trucks & Buses)			1.8%			1.3%			2.3%			1.6%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Clairmont Road @ LaVista Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Clairmont Road (NB)			Clairmont Road (SB)			LaVista Road (EB)			LaVista Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
7:15 AM to 7:30 AM	Auto Truck Bus		6 0 0	262 2 0	1 0 0	9 0 0	202 3 0	68 1 0	24 1 0	29 1 0	0 0 0	52 3 0	109 0 0	33 1 0	807	3,401			
7:30 AM to 7:45 AM	Auto Truck Bus		10 0 0	254 5 0	0 0 0	23 1 0	219 5 0	68 0 0	31 1 0	30 1 0	3 0 0	56 2 0	106 4 0	27 0 0	846				
7:45 AM to 8:00 AM	Auto Truck Bus	1	9 0 0	242 5 0	2 0 0	28 2 0	194 1 0	65 1 0	32 0 0	42 2 0	0 0 0	74 1 0	158 2 0	16 0 0	876				
8:00 AM to 8:15 AM	Auto Truck Bus		10 0 0	279 3 0	0 0 0	18 0 0	208 4 0	63 2 0	24 0 0	42 1 0	3 0 0	41 1 0	148 7 0	17 1 0	872				
8:15 AM to 8:30 AM	Auto Truck Bus		13 0 0	313 0 0	0 1 0	24 1 0	188 2 0	90 1 0	25 0 0	53 0 0	3 0 0	54 0 0	133 1 0	18 0 0	920				
8:30 AM to 8:45 AM	Auto Truck Bus		10 0 0	292 3 0	2 0 0	20 0 0	181 5 0	55 1 0	35 0 0	37 0 0	5 0 0	62 0 0	119 3 0	24 0 0	854				
8:45 AM to 9:00 AM	Auto Truck Bus		12 0 0	272 4 0	3 0 0	12 0 0	158 2 0	55 1 0	39 0 0	49 2 0	3 0 0	50 0 0	100 1 0	22 0 0	785				
9:00 AM to 9:15 AM	Auto Truck Bus		9 0 0	210 0 0	5 0 0	27 1 0	187 4 0	57 0 0	27 2 0	42 3 0	4 1 0	46 0 0	99 3 0	30 0 0	757				
Peak Hour Volume (PHV)			42	1,137	5	93	783	278	116	177	11	233	571	76	3,522			3,316	
PHV (by approach)			1,184			1,154			304			880							
Peak Hour Factor (PHF)			0.91			0.94			0.94			0.88							
Total Autos			1,172			1,134			301			864							
Total Trucks			12			20			3			16							
Total Buses			0			0			0			0							
% Auto			99.0%			98.3%			99.0%			98.2%							
% Heavy Vehicles (Trucks & Buses)			1.0%			1.7%			1.0%			1.8%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Houston Mill Road @ Clifton Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Houston Mill Road (NB)			Houston Mill Road (SB)			Clifton Road (EB)			Clifton Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R			
7:15 AM to 7:30 AM	Auto Truck Bus		3 0 0	1 0 0	1 2 0	41 0 0	81 0 0	25 1 0	23 0 0	79 9 0	44 1 0	59 3 0	127 3 0	14 0 0	517	2,622	
7:30 AM to 7:45 AM	Auto Truck Bus		1 1 0	2 0 0	5 3 0	53 3 0	84 1 0	29 0 0	14 1 0	120 10 0	76 0 0	89 3 0	139 5 0	20 1 0	660		
7:45 AM to 8:00 AM	Auto Truck Bus	1	5 0 0	3 0 0	3 3 0	48 0 0	85 0 0	42 0 0	32 0 0	108 15 0	110 0 0	87 2 0	150 5 0	36 1 0	735		
8:00 AM to 8:15 AM	Auto Truck Bus		6 0 0	9 0 0	5 2 0	39 0 0	84 0 0	39 1 0	28 0 0	97 7 0	85 0 0	111 2 0	148 11 0	36 0 0	710		
8:15 AM to 8:30 AM	Auto Truck Bus		6 0 0	4 0 0	6 3 0	43 0 0	74 0 0	40 0 0	29 0 0	120 5 0	60 1 0	125 2 0	165 6 0	18 0 0	707		
8:30 AM to 8:45 AM	Auto Truck Bus		5 0 0	4 0 0	9 3 0	36 0 0	91 0 0	35 0 0	24 0 0	88 8 0	80 0 0	118 2 0	165 2 0	15 0 0	685		
8:45 AM to 9:00 AM	Auto Truck Bus		3 0 0	8 0 0	5 2 0	28 0 0	110 0 0	24 1 0	18 0 0	92 5 0	87 0 0	121 2 0	133 11 0	28 0 0	678		
9:00 AM to 9:15 AM	Auto Truck Bus		2 0 0	6 0 0	4 2 0	31 0 0	100 1 0	35 1 0	27 0 0	116 9 0	63 2 0	116 2 0	140 10 0	22 1 0	690		
Peak Hour Volume (PHV)			22	20	34	166	334	157	113	448	336	449	652	106	2,837		
PHV (by approach)			76			657			897			1,207					
Peak Hour Factor (PHF)			0.86			0.94			0.85			0.95					
Total Autos			65			656			861			1,174					
Total Trucks			11			1			36			33					
Total Buses			0			0			0			0					
% Auto			85.5%			99.8%			96.0%			97.3%					
% Heavy Vehicles (Trucks & Buses)			14.5%			0.2%			4.0%			2.7%					

PROJECT: CDC Roybal Campus EIS
LOCATION: Houston Mill Road @ LaVista Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Houston Mill Road (NB)			Houston Mill Road (SB)			LaVista Road (EB)			LaVista Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
7:15 AM to 7:30 AM	Auto Truck Bus		15 0 0	0 0 0	24 0 0	0 0 0	0 0 0	0 0 0	0 0 0	52 2 0	26 1 0	130 2 0	146 3 0	0 0 0	401	1,933	2,034		
7:30 AM to 7:45 AM	Auto Truck Bus		16 1 0	0 0 0	30 0 0	0 0 0	0 0 0	0 0 0	0 3 0	82 0 0	30 0 0	122 2 0	217 4 0	0 0 0	507				
7:45 AM to 8:00 AM	Auto Truck Bus	1	22 1 0	0 0 0	43 0 0	0 0 0	0 0 0	0 0 0	0 2 0	86 0 0	16 0 0	137 0 0	198 2 0	0 0 0	507				
8:00 AM to 8:15 AM	Auto Truck Bus		26 0 0	0 0 0	41 1 0	0 0 0	0 0 0	0 0 0	0 0 0	75 0 0	19 0 0	144 1 0	208 3 0	0 0 0	518				
8:15 AM to 8:30 AM	Auto Truck Bus		17 1 0	0 0 0	44 0 0	0 0 0	0 0 0	0 0 0	0 1 0	87 0 0	12 0 0	119 1 0	215 5 0	0 0 0	502				
8:30 AM to 8:45 AM	Auto Truck Bus		13 0 0	0 0 0	31 0 0	0 0 0	0 0 0	0 0 0	0 2 0	90 0 0	15 0 0	112 0 0	228 3 0	0 0 0	494				
8:45 AM to 9:00 AM	Auto Truck Bus		21 0 0	0 0 0	32 0 0	0 0 0	0 0 0	0 0 0	0 3 0	88 0 0	16 0 0	100 1 0	190 5 0	0 0 0	456				
9:00 AM to 9:15 AM	Auto Truck Bus		12 0 0	0 0 0	32 2 0	0 0 0	0 0 0	0 0 0	0 8 0	98 0 0	17 0 0	102 0 0	178 3 0	0 0 0	452				
Peak Hour Volume (PHV)			80	0	160	0	0	0	0	343	62	514	862	0	2,021				
PHV (by approach)			240			0			405			1,376							
Peak Hour Factor (PHF)			0.88			#DIV/0!			0.95			0.97							
Total Autos			237			0			400			1,361							
Total Trucks			3			0			5			15							
Total Buses			0			0			0			0							
% Auto			98.8%			#DIV/0!			98.8%			98.9%							
% Heavy Vehicles (Trucks & Buses)			1.3%			#DIV/0!			1.2%			1.1%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Briarcliff Road @ Shephards Lane
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Briarcliff Road (NB)			Briarcliff Road (SB)			Shepards Lane (EB)			Shepards Lane (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R			
7:15 AM to 7:30 AM	Auto Truck Bus		53 0 0	137 4 0	0 0 0	0 0 0	258 6 0	4 0 0	2 0 0	0 0 0	65 1 0	0 0 0	0 0 0	530	2,287		
7:30 AM to 7:45 AM	Auto Truck Bus		81 1 0	161 10 0	0 0 0	0 0 0	252 5 0	6 0 0	0 0 0	0 0 0	49 0 0	0 0 0	0 0 0	565			
7:45 AM to 8:00 AM	Auto Truck Bus	1	71 0 0	183 9 0	0 0 0	0 0 0	282 9 0	2 0 0	1 0 0	0 0 0	34 0 0	0 0 0	0 0 0	591			
8:00 AM to 8:15 AM	Auto Truck Bus		69 3 0	169 10 0	0 0 0	0 0 0	278 6 0	3 0 0	7 0 0	0 0 0	56 0 0	0 0 0	0 0 0	601			
8:15 AM to 8:30 AM	Auto Truck Bus		62 0 0	194 6 0	0 0 0	0 0 0	268 10 0	1 0 0	1 0 0	0 0 0	50 0 0	0 0 0	0 0 0	592			
8:30 AM to 8:45 AM	Auto Truck Bus		54 0 0	184 6 0	0 0 0	0 0 0	280 14 0	1 1 0	5 0 0	0 0 0	61 1 0	0 0 0	0 0 0	607			
8:45 AM to 9:00 AM	Auto Truck Bus		35 0 0	165 9 0	0 0 0	0 0 0	289 10 0	4 0 0	1 0 0	0 0 0	62 0 0	0 0 0	0 0 0	575			
9:00 AM to 9:15 AM	Auto Truck Bus		50 3 0	177 9 0	0 0 0	0 0 0	278 6 0	5 0 0	5 0 0	0 0 0	53 2 0	0 0 0	0 0 0	588			
Peak Hour Volume (PHV)			259	761	0	0	1,147	8	14	0	202	0	0	0			2,391
PHV (by approach)			1,020			1,155			216			0					
Peak Hour Factor (PHF)			0.97			0.98			0.81			#DIV/0!					
Total Autos			986			1,115			215			0					
Total Trucks			34			40			1			0					
Total Buses			0			0			0			0					
% Auto			96.7%			96.5%			99.5%			#DIV/0!					
% Heavy Vehicles (Trucks & Buses)			3.3%			3.5%			0.5%			#DIV/0!					

PROJECT: CDC Roybal Campus EIS
LOCATION: Briarcliff Road @ Johnson-Zonolite Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Briarcliff Road (NB)			Briarcliff Road (SB)			Johnson-Zonolite Rd (EB)			Johnson-Zonolite Rd (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
7:15 AM to 7:30 AM	Auto Truck Bus		7 1 0	100 3 0	2 0 0	4 1 0	73 1 0	44 1 0	69 3 0	4 0 0	4 4 0	1 0 0	3 0 0	3 0 0	328	1,685			
7:30 AM to 7:45 AM	Auto Truck Bus		7 0 0	122 6 0	3 0 0	5 0 0	72 0 0	58 2 0	95 3 0	9 0 0	2 2 0	5 0 0	6 0 0	4 0 0	401				
7:45 AM to 8:00 AM	Auto Truck Bus	1	5 2 0	131 1 0	4 0 0	12 1 0	96 1 0	76 2 0	109 3 0	11 0 0	3 2 0	2 0 0	4 0 0	3 0 0	468				
8:00 AM to 8:15 AM	Auto Truck Bus		5 0 0	115 5 0	6 0 0	11 1 0	122 3 0	80 3 0	110 2 0	9 0 0	3 0 0	7 1 0	5 0 0	0 0 0	488				
8:15 AM to 8:30 AM	Auto Truck Bus		4 0 0	123 3 0	1 0 0	11 1 0	108 3 0	77 2 0	104 3 0	11 0 0	0 0 0	6 1 0	4 0 0	4 0 0	466				
8:30 AM to 8:45 AM	Auto Truck Bus		8 0 0	98 4 0	6 0 0	15 0 0	119 5 0	99 3 0	110 2 0	9 0 0	2 0 0	2 0 0	5 0 0	4 0 0	491				
8:45 AM to 9:00 AM	Auto Truck Bus		12 0 0	107 3 0	2 0 0	13 1 0	126 3 0	120 3 0	115 2 0	11 0 0	0 2 0	0 0 0	4 1 0	4 0 0	529				
9:00 AM to 9:15 AM	Auto Truck Bus		19 0 0	108 2 0	6 0 0	9 0 0	112 4 0	102 2 0	79 3 0	8 0 0	6 0 0	5 0 0	6 0 0	5 0 0	476				
Peak Hour Volume (PHV)			24	480	17	52	457	342	443	40	10	19	18	11	1,913				
PHV (by approach)			521			851			493			48							
Peak Hour Factor (PHF)			0.91			0.88			0.96			0.80							
Total Autos			506			826			481			46							
Total Trucks			15			25			12			2							
Total Buses			0			0			0			0							
% Auto			97.1%			97.1%			97.6%			95.8%							
% Heavy Vehicles (Trucks & Buses)			2.9%			2.9%			2.4%			4.2%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Houston Mill Road @ CDC Entrance
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Houston Mill Road (NB)			Houston Mill Road (SB)			CDC Entrance (EB)			0 (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R			
7:15 AM to 7:30 AM	Auto Truck Bus		4 0 0	1 2 0	4 0 0	64 0 0	0 2 0	69 0 0	0 0 0	0 0 0	1 0 0	0 0 0	0 0 0	0 0 0	147	720	
7:30 AM to 7:45 AM	Auto Truck Bus		4 0 0	2 3 0	1 0 0	84 0 0	0 1 0	72 0 0	5 0 0	0 0 0	2 0 0	0 0 0	0 0 0	0 0 0	174		
7:45 AM to 8:00 AM	Auto Truck Bus	1	2 0 0	4 4 0	1 0 0	108 0 0	2 0 0	74 0 0	2 0 0	0 0 0	2 0 0	0 0 0	0 0 0	0 0 0	199		
8:00 AM to 8:15 AM	Auto Truck Bus		5 0 0	13 2 0	0 0 0	80 0 0	4 0 0	95 0 0	1 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	200		
8:15 AM to 8:30 AM	Auto Truck Bus		1 0 0	6 1 0	1 0 0	62 0 0	6 1 0	80 0 0	4 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	162		
8:30 AM to 8:45 AM	Auto Truck Bus		7 0 0	11 1 0	3 0 0	72 0 0	4 0 0	96 0 0	6 0 0	0 0 0	1 0 0	0 0 0	0 0 0	0 0 0	201		
8:45 AM to 9:00 AM	Auto Truck Bus		12 0 0	16 2 0	12 0 0	70 0 0	7 1 0	88 0 0	2 0 0	0 0 0	1 0 0	0 0 0	0 0 0	0 0 0	211		
9:00 AM to 9:15 AM	Auto Truck Bus		8 0 0	6 2 0	3 0 0	65 0 0	4 1 0	94 0 0	3 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	186		
Peak Hour Volume (PHV)			15	42	5	322	17	345	13	0	3	0	0	0	762		
PHV (by approach)			62			684			16			0					
Peak Hour Factor (PHF)			0.70			0.93			0.57			#DIV/0!					
Total Autos			54			683			16			0					
Total Trucks			8			1			0			0					
Total Buses			0			0			0			0					
% Auto			87.1%			99.9%			100.0%			#DIV/0!					
% Heavy Vehicles (Trucks & Buses)			12.9%			0.1%			0.0%			#DIV/0!					

PROJECT: CDC Roybal Campus EIS
LOCATION: CDC Entrance @ Clifton Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	CDC Entrance (NB)			CDC Entrance (SB)			Clifton Road (EB)			Clifton Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R			
7:15 AM to 7:30 AM	Auto Truck Bus		12 0 0	0 0 0	5 0 0	0 0 0	0 0 0	0 0 0	4 0 0	191 6 0	133 0 0	42 0 0	88 2 0	1 0 0	484	2,167	
7:30 AM to 7:45 AM	Auto Truck Bus		9 0 0	0 0 0	15 0 0	0 0 0	0 0 0	1 0 0	2 0 0	244 10 0	108 0 0	38 0 0	122 3 0	1 0 0	553		
7:45 AM to 8:00 AM	Auto Truck Bus	1	16 0 0	0 0 0	5 0 0	0 1 0	0 0 0	1 0 0	7 0 0	242 13 0	93 0 0	47 0 0	128 7 0	1 0 0	561		
8:00 AM to 8:15 AM	Auto Truck Bus		15 0 0	0 0 0	10 0 0	2 0 0	0 0 0	2 0 0	7 1 0	220 3 0	139 1 0	50 0 0	107 12 0	0 0 0	569		
8:15 AM to 8:30 AM	Auto Truck Bus		15 0 0	0 0 0	8 0 0	0 0 0	0 0 0	3 0 0	5 1 0	228 8 0	141 0 0	67 0 0	118 5 0	0 1 0	600		
8:30 AM to 8:45 AM	Auto Truck Bus		21 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 2 0	185 5 0	107 1 0	60 0 0	108 2 0	1 0 0	492		
8:45 AM to 9:00 AM	Auto Truck Bus		12 2 0	0 0 0	9 0 0	0 0 0	0 0 0	4 1 0	4 0 0	211 9 0	134 0 0	43 1 0	98 7 0	0 0 0	535		
9:00 AM to 9:15 AM	Auto Truck Bus		16 1 0	0 0 0	13 0 0	0 0 0	0 0 0	2 1 0	8 1 0	230 11 0	124 0 0	42 0 0	112 12 0	2 0 0	575		
Peak Hour Volume (PHV)			67	0	23	3	0	6	23	904	482	224	487	3	2,222		
PHV (by approach)			90			9			1,409			714					
Peak Hour Factor (PHF)			0.90			0.56			0.92			0.93					
Total Autos			90			8			1,374			687					
Total Trucks			0			1			35			27					
Total Buses			0			0			0			0					
% Auto			100.0%			88.9%			97.5%			96.2%					
% Heavy Vehicles (Trucks & Buses)			0.0%			11.1%			2.5%			3.8%					

PROJECT: CDC Roybal Campus EIS
LOCATION: Emory Conference Center @ Clifton Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Emory Conf Ctr (NB)			Emory Conf Ctr (SB)			Clifton Road (EB)			Clifton Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
7:15 AM to 7:30 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	4 0 0	0 0 0	5 0 0	22 0 0	178 8 0	0 0 0	0 0 0	161 3 0	23 2 0	406	1,732			
7:30 AM to 7:45 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	10 1 0	0 0 0	5 1 0	30 1 0	187 11 0	0 0 0	0 0 0	133 3 0	23 2 0	407				
7:45 AM to 8:00 AM	Auto Truck Bus	1	0 0 0	0 0 0	0 0 0	4 0 0	0 0 0	2 0 0	17 0 0	225 8 0	0 0 0	0 0 0	173 6 0	26 2 0	463				
8:00 AM to 8:15 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	4 3 0	0 0 0	2 0 0	18 0 0	216 5 0	0 0 0	0 0 0	170 8 0	29 1 0	456				
8:15 AM to 8:30 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	8 1 0	0 0 0	2 0 0	23 1 0	203 5 0	0 0 0	0 0 0	170 5 0	30 2 0	450				
8:30 AM to 8:45 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	7 3 0	0 0 0	4 0 0	22 0 0	172 5 0	0 0 0	0 0 0	166 5 0	34 2 0	420				
8:45 AM to 9:00 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	7 1 0	0 0 0	4 0 0	17 0 0	169 10 0	0 0 0	0 0 0	153 8 0	29 1 0	399				
9:00 AM to 9:15 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	9 2 0	0 0 0	6 0 0	20 1 0	197 8 0	0 0 0	0 0 0	140 9 0	31 1 0	424				
Peak Hour Volume (PHV)			0	0	0	30	0	10	81	839	0	0	703	126	1,789				
PHV (by approach)			0			40			920			829							
Peak Hour Factor (PHF)			#DIV/0!			0.71			0.92			1.00							
Total Autos			0			33			896			798							
Total Trucks			0			7			24			31							
Total Buses			0			0			0			0							
% Auto			#DIV/0!			82.5%			97.4%			96.3%							
% Heavy Vehicles (Trucks & Buses)			#DIV/0!			17.5%			2.6%			3.7%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Emory Conference Center (Hotel) @ Clifton Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Emory Conf Ctr (Hotel) (NB)			Emory Conf Ctr (Hotel) (SB)			Clifton Road (EB)			Clifton Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
7:15 AM to 7:30 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	1 0 0	0 0 0	1 0 0	11 0 0	189 8 0	0 0 0	0 0 0	144 4 0	5 0 0	363	1,636			
7:30 AM to 7:45 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	0 1 0	0 0 0	2 0 0	11 0 0	231 12 0	0 0 0	0 0 0	137 3 0	1 0 0	398				
7:45 AM to 8:00 AM	Auto Truck Bus	1	0 0 0	0 0 0	0 0 0	1 0 0	0 0 0	2 0 0	11 0 0	225 7 0	0 0 0	0 0 0	163 5 0	3 0 0	417				
8:00 AM to 8:15 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	2 0 0	0 0 0	1 0 0	6 0 0	255 4 0	0 0 0	0 0 0	175 11 0	4 0 0	458				
8:15 AM to 8:30 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	1 0 0	0 0 0	3 1 0	5 0 0	202 6 0	0 0 0	0 0 0	161 4 0	6 0 0	389				
8:30 AM to 8:45 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	2 0 0	0 0 0	2 0 0	2 0 0	192 7 0	0 0 0	0 0 0	184 4 0	5 0 0	398				
8:45 AM to 9:00 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	1 0 0	0 0 0	5 0 0	8 0 0	189 12 0	0 0 0	0 0 0	160 9 0	2 0 0	386				
9:00 AM to 9:15 AM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	4 0 0	0 0 0	2 1 0	8 1 0	221 9 0	0 0 0	0 0 0	128 5 1	0 1 0	380				
Peak Hour Volume (PHV)			0	0	0	6	0	9	24	898	0	0	707	18	1,662				
PHV (by approach)			0			15			922			725							
Peak Hour Factor (PHF)			#DIV/0!			0.75			0.87			0.94							
Total Autos			0			14			898			701							
Total Trucks			0			1			24			24							
Total Buses			0			0			0			0							
% Auto			#DIV/0!			93.3%			97.4%			96.7%							
% Heavy Vehicles (Trucks & Buses)			#DIV/0!			6.7%			2.6%			3.3%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Clifton Road @ Briarcliff Way
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Clifton Road (NB)			Clifton Road (SB)			Old Briarcliff Way (EB)			Old Briarcliff Way (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME	
			L	T	R	L	T	R	L	T	R	L	T	R				
7:15 AM to 7:30 AM	Auto Truck Bus		2 0 0	82 1 0	12 1 0	13 0 0	250 11 0	1 0 0	1 0 0	20 0 0	58 1 0	4 0 0	4 0 0	1 0 0	462	2,128		
7:30 AM to 7:45 AM	Auto Truck Bus		1 0 0	96 2 0	11 2 0	16 1 0	304 7 0	0 0 0	0 0 0	12 0 0	63 1 0	11 2 0	3 0 0	4 1 0	537			
7:45 AM to 8:00 AM	Auto Truck Bus	1	6 0 0	114 5 0	16 2 0	9 0 0	290 6 0	4 0 0	2 0 0	12 0 0	64 0 0	13 3 0	3 0 0	3 0 0	552			
8:00 AM to 8:15 AM	Auto Truck Bus		7 0 0	106 5 0	11 2 0	21 1 0	298 5 0	4 0 0	4 0 0	21 1 0	77 0 0	6 1 0	2 0 0	5 0 0	577			
8:15 AM to 8:30 AM	Auto Truck Bus		3 1 0	102 3 0	18 1 0	17 0 0	300 6 0	4 0 0	5 0 0	10 0 0	56 0 0	2 1 0	2 0 0	3 3 0	537			
8:30 AM to 8:45 AM	Auto Truck Bus		8 1 0	88 4 0	29 0 0	18 0 0	242 5 0	2 0 0	0 0 0	19 0 0	56 0 0	5 1 0	5 0 0	2 0 0	485			
8:45 AM to 9:00 AM	Auto Truck Bus		2 1 0	98 7 0	14 1 0	12 0 0	269 5 0	3 0 0	1 0 0	12 0 0	66 2 0	2 1 0	0 0 0	3 1 0	500			
9:00 AM to 9:15 AM	Auto Truck Bus		9 1 0	94 4 0	19 2 0	15 1 0	264 7 0	1 0 0	3 0 0	11 0 0	41 1 0	1 3 0	3 0 0	4 0 0	484			
Peak Hour Volume (PHV)			26	427	79	66	1,152	14	11	63	253	32	12	16	2,151			
PHV (by approach)			532			1,232			327			60						
Peak Hour Factor (PHF)			0.93			0.94			0.79			0.68						
Total Autos			508			1,209			326			51						
Total Trucks			24			23			1			9						
Total Buses			0			0			0			0						
% Auto			95.5%			98.1%			99.7%			85.0%						
% Heavy Vehicles (Trucks & Buses)			4.5%			1.9%			0.3%			15.0%						

PROJECT: CDC Roybal Campus EIS
LOCATION: Clifton Road @ Gatewood Road
TIME PERIOD: AM
WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Clifton Road (NB)			Clifton Road (SB)			Gatewood Road (EB)			Gatewood Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
7:15 AM to 7:30 AM	Auto Truck Bus		2 0 0	220 8 0	28 2 0	2 0 0	151 8 0	3 0 0	3 0 0	1 0 0	2 0 0	11 0 0	0 0 0	2 1 0	444	1,963			
7:30 AM to 7:45 AM	Auto Truck Bus		5 1 0	223 5 0	34 1 0	4 0 0	165 17 0	0 0 0	1 0 0	0 0 0	2 0 0	9 0 0	0 0 0	2 1 0	470				
7:45 AM to 8:00 AM	Auto Truck Bus	1	3 0 0	280 11 0	29 0 0	6 0 0	146 11 0	2 0 0	1 0 0	0 0 0	0 0 0	9 0 0	0 0 0	5 1 0	504				
8:00 AM to 8:15 AM	Auto Truck Bus		6 0 0	298 11 0	40 3 0	3 0 0	161 7 0	3 0 0	1 0 0	0 0 0	2 0 0	8 0 0	0 0 0	1 1 0	545				
8:15 AM to 8:30 AM	Auto Truck Bus		9 0 0	269 9 0	32 2 0	1 0 0	165 8 0	2 0 0	0 0 0	0 0 0	7 1 0	11 0 0	0 0 0	2 0 0	518				
8:30 AM to 8:45 AM	Auto Truck Bus		14 0 0	313 6 0	37 1 0	3 1 0	116 10 0	4 0 0	0 0 0	0 0 0	8 0 0	14 0 0	1 0 0	6 1 0	535				
8:45 AM to 9:00 AM	Auto Truck Bus		13 0 0	269 10 0	34 3 0	4 0 0	115 12 0	4 0 0	0 0 0	1 0 0	9 0 0	9 1 0	0 0 0	5 4 0	493				
9:00 AM to 9:15 AM	Auto Truck Bus		13 0 0	224 10 0	33 2 0	3 2 0	141 7 0	6 0 0	0 0 0	1 0 0	9 0 0	18 2 0	0 0 0	7 2 0	480				
Peak Hour Volume (PHV)			32	1,197	144	14	624	11	2	0	18	42	1	17	2,102				
PHV (by approach)			1,373			649			20			60							
Peak Hour Factor (PHF)			0.93			0.92			0.63			0.68							
Total Autos			1,330			612			19			57							
Total Trucks			43			37			1			3							
Total Buses			0			0			0			0							
% Auto			96.9%			94.3%			95.0%			95.0%							
% Heavy Vehicles (Trucks & Buses)			3.1%			5.7%			5.0%			5.0%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Briarcliff Road @ N Decatur Road
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Briarcliff Road (NB)			Briarcliff Road (SB)			Decatur Road (EB)			Decatur Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
4:00 PM to 4:15 PM	Auto Truck Bus		9 0 0	121 5 0	33 1 0	17 0 0	142 2 0	11 0 0	9 0 0	50 1 0	11 0 0	73 7 0	67 1 0	20 0 0	580	2,259			
4:15 PM to 4:30 PM	Auto Truck Bus		14 0 0	85 3 0	33 1 0	14 1 0	147 6 0	7 0 0	7 0 0	77 0 0	10 1 0	57 3 0	48 2 0	18 1 0	535				
4:30 PM to 4:45 PM	Auto Truck Bus		10 0 0	87 4 0	40 1 0	16 0 0	157 1 0	5 1 0	12 1 0	68 1 0	8 1 0	63 1 0	53 1 0	24 0 0	555				
4:45 PM to 5:00 PM	Auto Truck Bus		24 0 0	99 3 0	39 2 0	18 0 0	132 3 0	8 0 0	8 0 0	89 1 0	9 0 0	60 1 0	76 0 0	17 0 0	589				
5:00 PM to 5:15 PM	Auto Truck Bus	1	14 0 0	84 5 0	39 3 0	22 0 0	143 1 0	5 0 0	5 0 0	98 2 0	14 0 0	60 1 0	52 1 0	20 0 0	569				
5:15 PM to 5:30 PM	Auto Truck Bus		19 0 0	112 1 0	36 2 0	21 0 0	132 2 0	7 0 0	6 0 0	114 1 0	13 0 0	46 0 0	73 0 0	18 0 0	603				
5:30 PM to 5:45 PM	Auto Truck Bus		16 0 0	118 3 0	31 0 0	20 0 0	135 1 0	7 0 0	12 0 0	116 0 0	14 1 0	60 4 0	49 0 0	18 0 0	605				
5:45 PM to 6:00 PM	Auto Truck Bus		9 0 0	123 4 0	27 1 0	29 0 0	147 1 0	4 0 0	13 0 0	108 2 0	20 0 0	54 1 0	72 1 0	25 0 0	641				
6:00 PM to 6:15 PM	Auto to Bus		13 0 0	117 0 0	34 0 0	24 0 0	147 2 0	5 0 0	4 0 0	106 0 0	14 0 0	46 2 0	85 0 0	16 0 0	615				
6:15 PM to 6:30 PM	Auto to Bus		10 0 0	130 1 0	31 1 0	24 0 0	139 0 0	15 1 0	11 0 0	87 0 0	15 0 0	53 1 0	80 1 0	23 0 0	623				
Peak Hour Volume (PHV)			58	450	139	92	562	23	36	441	62	226	248	81	2,418				
PHV (by approach)			647			677			539			555							
Peak Hour Factor (PHF)			0.95			0.94			0.94			0.91							
Total Autos			628			672			533			547							
Total Trucks			19			5			6			8							
Total Buses			0			0			0			0							
% Auto			97.1%			99.3%			98.9%			98.6%							
% Heavy Vehicles (Trucks & Buses)			2.9%			0.7%			1.1%			1.4%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Briarcliff Road @ Clifton Road
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Briarcliff Road (NB)			Briarcliff Road (SB)			Clifton Road (EB)			Clifton Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R			
4:00 PM to 4:15 PM	Auto Truck Bus		0 0 0	163 4 0	36 2 0	72 3 0	165 1 0	0 0 0	0 0 0	0 0 0	0 0 0	76 3 0	0 0 0	195 5 0	725	3,025	
4:15 PM to 4:30 PM	Auto Truck Bus		0 0 0	148 4 0	36 0 0	79 1 0	167 7 0	0 0 0	0 0 0	0 0 0	0 0 0	65 3 0	0 0 0	190 2 0	702		
4:30 PM to 4:45 PM	Auto Truck Bus		0 0 0	166 2 0	58 3 0	109 3 0	216 3 0	0 0 0	0 0 0	0 0 0	0 0 0	86 0 0	0 0 0	179 2 0	827		
4:45 PM to 5:00 PM	Auto Truck Bus		0 0 0	125 5 0	54 1 0	100 1 0	214 2 0	0 0 0	0 0 0	0 0 0	0 0 0	75 2 0	0 0 0	189 3 0	771		
5:00 PM to 5:15 PM	Auto Truck Bus	1	0 0 0	170 2 0	64 3 0	105 2 0	235 2 0	0 0 0	0 0 0	0 0 0	0 0 0	79 1 0	0 0 0	147 1 0	811		
5:15 PM to 5:30 PM	Auto Truck Bus		0 0 0	131 3 0	52 1 0	97 3 0	216 3 0	0 0 0	0 0 0	0 0 0	0 0 0	89 0 0	0 0 0	134 0 0	729		
5:30 PM to 5:45 PM	Auto Truck Bus		0 0 0	121 2 0	60 0 0	94 1 0	230 2 0	0 0 0	0 0 0	0 0 0	0 0 0	68 0 0	0 0 0	77 1 0	656		
5:45 PM to 6:00 PM	Auto Truck Bus		0 0 0	202 3 0	76 1 0	101 1 0	222 2 0	0 0 0	0 0 0	0 0 0	0 0 0	67 1 0	0 0 0	142 3 0	821		
Peak Hour Volume (PHV)			0	634	257	404	912	0	0	0	0	305	0	505	3,017		
PHV (by approach)			891			1,316			0			810					
Peak Hour Factor (PHF)			0.79			0.96			#DIV/0!			0.89					
Total Autos			876			1,300			0			803					
Total Trucks			15			16			0			7					
Total Buses			0			0			0			0					
% Auto			98.3%			98.8%			#DIV/0!			99.1%					
% Heavy Vehicles (Trucks & Buses)			1.7%			1.2%			#DIV/0!			0.9%					

PROJECT: CDC Roybal Campus EIS
LOCATION: Briarcliff Road @ LaVista Road
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Briarcliff Road (NB)			Briarcliff Road (SB)			LaVista Road (EB)			LaVista Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME	
			L	T	R	L	T	R	L	T	R	L	T	R				
4:00 PM to 4:15 PM	Auto Truck Bus		30 1 0	167 7 0	37 1 0	19 0 0	135 3 0	15 0 0	13 0 0	79 1 0	19 3 0	36 0 0	70 3 0	15 0 0	654	2,687		
4:15 PM to 4:30 PM	Auto Truck Bus		30 3 0	166 2 0	21 1 0	17 0 0	152 3 0	13 0 0	13 0 0	81 3 0	19 3 0	30 1 0	71 3 0	18 1 0	651			
4:30 PM to 4:45 PM	Auto Truck Bus		32 2 0	162 4 0	36 1 0	20 0 0	165 4 0	10 0 0	9 1 0	85 0 0	14 2 0	48 1 0	70 0 0	18 1 0	685			
4:45 PM to 5:00 PM	Auto Truck Bus		25 0 0	166 3 0	35 2 0	28 0 0	161 4 0	11 0 0	14 1 0	91 2 0	22 0 0	49 1 0	54 3 0	24 1 0	697			
5:00 PM to 5:15 PM	Auto Truck Bus	1	22 3 0	162 5 0	41 1 0	27 1 0	165 2 0	9 0 0	12 0 0	79 5 0	22 1 0	48 0 0	89 0 0	21 2 0	717			
5:15 PM to 5:30 PM	Auto Truck Bus		20 0 0	136 0 0	29 2 0	29 0 0	189 4 0	12 0 0	10 0 0	75 3 0	20 1 0	34 0 0	63 1 0	24 0 0	652			
5:30 PM to 5:45 PM	Auto Truck Bus		9 0 0	83 1 0	23 0 0	16 0 0	174 2 0	20 0 0	11 0 0	85 1 0	21 0 0	41 0 0	77 1 0	19 0 0	584			
5:45 PM to 6:00 PM	Auto Truck Bus		27 1 0	160 5 0	31 1 0	31 0 0	156 3 0	14 0 0	12 0 0	83 0 0	24 1 0	45 1 0	68 2 0	19 0 0	684			
Peak Hour Volume (PHV)			82	552	128	104	695	55	45	331	90	169	301	85	2,637			
PHV (by approach)			762			854			466			555						
Peak Hour Factor (PHF)			0.81			0.91			0.97			0.87						
Total Autos			743			842			454			548						
Total Trucks			19			12			12			7						
Total Buses			0			0			0			0						
% Auto			97.5%			98.6%			97.4%			98.7%						
% Heavy Vehicles (Trucks & Buses)			2.5%			1.4%			2.6%			1.3%						

PROJECT: CDC Roybal Campus EIS
LOCATION: North Druid Hills Road @ LaVista Road
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	N Druid Hill Road (NB)			N Druid Hill Road (SB)			LaVista Road (EB)			LaVista Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME	
			L	T	R	L	T	R	L	T	R	L	T	R				
4:00 PM to 4:15 PM	Auto Truck Bus		47 2 0	183 3 0	16 1 0	29 0 0	287 0 0	34 0 0	56 0 0	153 2 0	99 1 0	28 0 0	53 1 0	16 1 0	1,012	4,104		
4:15 PM to 4:30 PM	Auto Truck Bus		68 0 0	206 1 0	21 0 0	23 0 0	276 4 0	18 1 0	57 0 0	146 4 0	68 2 0	21 0 0	83 1 0	18 0 0	1,018			
4:30 PM to 4:45 PM	Auto Truck Bus		62 1 0	204 2 0	28 0 0	29 0 0	274 4 0	22 0 0	61 1 0	162 2 0	93 1 0	25 0 0	67 2 0	18 1 0	1,059			
4:45 PM to 5:00 PM	Auto Truck Bus		60 1 0	182 2 0	11 0 0	31 0 0	259 6 0	20 0 0	61 0 0	176 2 0	73 1 0	23 0 0	85 2 0	20 0 0	1,015			
5:00 PM to 5:15 PM	Auto Truck Bus	1	60 0 0	178 0 0	24 0 0	35 0 0	291 6 0	14 0 0	73 2 0	167 2 0	80 3 0	24 0 0	73 1 0	23 0 0	1,056			
5:15 PM to 5:30 PM	Auto Truck Bus		65 0 0	196 1 0	21 0 0	33 0 0	313 1 0	23 0 0	64 1 0	158 3 0	77 4 0	39 0 0	112 1 0	24 0 0	1,136			
5:30 PM to 5:45 PM	Auto Truck Bus		59 1 0	197 1 0	19 0 0	22 0 0	335 0 0	20 0 0	76 0 0	156 1 0	86 2 0	29 0 0	105 0 0	30 0 0	1,139			
5:45 PM to 6:00 PM	Auto Truck Bus		67 4 0	223 1 0	15 1 0	25 1 0	311 6 1	27 1 0	71 0 0	150 1 0	69 0 0	28 0 0	98 2 0	31 1 0	1,133			
Peak Hour Volume (PHV)			256	797	80	116	1,263	85	287	638	321	120	392	109	4,464			
PHV (by approach)			1,133			1,464			1,246			621						
Peak Hour Factor (PHF)			0.91			0.97			0.95			0.88						
Total Autos			1,124			1,449			1,227			616						
Total Trucks			9			15			19			5						
Total Buses			0			0			0			0						
% Auto			99.2%			99.0%			98.5%			99.2%						
% Heavy Vehicles (Trucks & Buses)			0.8%			1.0%			1.5%			0.8%						

PROJECT: CDC Roybal Campus EIS
LOCATION: Clairmont Road @ Mason Mill Road
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Clairmont Road (NB)			Clairmont Road (SB)			Mason Mill Road (EB)			Mason Mill Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R			
4:00 PM to 4:15 PM	Auto Truck Bus		26 0 0	327 2 0	0 0 0	0 0 0	231 1 0	20 0 0	83 1 0	0 0 0	31 0 0	0 0 0	0 0 0	0 0 0	722	3,122	
4:15 PM to 4:30 PM	Auto Truck Bus		30 0 0	373 1 0	0 0 0	0 0 0	259 2 0	27 1 0	95 0 0	0 0 0	34 0 0	0 0 0	0 0 0	0 0 0	822		
4:30 PM to 4:45 PM	Auto Truck Bus		36 0 0	338 3 0	0 0 0	0 0 0	225 3 0	24 0 0	82 2 0	0 0 0	42 1 0	0 0 0	0 0 0	0 0 0	756		
4:45 PM to 5:00 PM	Auto Truck Bus		52 0 0	375 5 0	0 0 0	0 0 0	255 4 0	28 0 0	69 1 0	0 0 0	33 0 0	0 0 0	0 0 0	0 0 0	822		
5:00 PM to 5:15 PM	Auto Truck Bus	1	40 0 0	347 2 0	0 0 0	0 0 0	279 2 0	25 0 0	67 1 0	0 0 0	44 0 0	0 0 0	0 0 0	0 0 0	807		
5:15 PM to 5:30 PM	Auto Truck Bus		57 0 0	340 1 0	0 0 0	0 0 0	257 2 0	26 1 0	90 0 0	0 0 0	51 0 0	0 0 0	0 0 0	0 0 0	825		
5:30 PM to 5:45 PM	Auto Truck Bus		31 1 0	376 4 0	0 0 0	0 0 0	298 3 0	27 1 0	76 0 0	0 0 0	40 0 0	0 0 0	0 0 0	0 0 0	857		
5:45 PM to 6:00 PM	Auto Truck Bus		34 0 0	321 2 0	0 0 0	0 0 0	266 2 0	19 1 0	72 0 0	0 0 0	54 0 0	0 0 0	0 0 0	0 0 0	771		
Peak Hour Volume (PHV)			163	1,393	0	0	1,109	100	306	0	189	0	0	0	3,260		
PHV (by approach)			1,556			1,209			495			0					
Peak Hour Factor (PHF)			0.94			0.92			0.88			#DIV/0!					
Total Autos			1,546			1,197			494			0					
Total Trucks			10			12			1			0					
Total Buses			0			0			0			0					
% Auto			99.4%			99.0%			99.8%			#DIV/0!					
% Heavy Vehicles (Trucks & Buses)			0.6%			1.0%			0.2%			#DIV/0!					

PROJECT: CDC Roybal Campus EIS
LOCATION: Houston Mill Road @ Mason Mill Road
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Houston Mill Road (NB)			Houston Mill Road (SB)			Mason Mill Road (EB)			Mason Mill Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R			
4:00 PM to 4:15 PM	Auto Truck Bus		1 0 0	127 0 0	110 0 0	10 0 0	28 0 0	0 0 0	1 1 0	0 0 0	3 0 0	21 0 0	3 0 0	25 0 0	330	1,443	
4:15 PM to 4:30 PM	Auto Truck Bus		2 0 0	138 2 0	102 1 0	18 0 0	34 1 0	4 0 0	0 1 0	4 0 0	0 0 0	39 0 0	3 0 0	21 0 0	370		
4:30 PM to 4:45 PM	Auto Truck Bus		3 0 0	146 2 0	84 0 0	15 0 0	38 1 0	2 0 0	1 0 0	2 0 0	1 0 0	28 0 0	2 0 0	19 0 0	344		
4:45 PM to 5:00 PM	Auto Truck Bus		1 0 0	151 0 0	92 1 0	19 1 0	47 0 0	1 0 0	0 0 0	4 0 0	2 0 0	44 0 0	0 0 0	35 1 0	399		
5:00 PM to 5:15 PM	Auto Truck Bus	1	1 0 0	133 0 0	110 0 0	24 0 0	34 0 0	2 0 0	3 0 0	3 0 0	2 0 0	29 0 0	3 0 0	37 0 0	381		
5:15 PM to 5:30 PM	Auto Truck Bus		3 0 0	168 0 0	97 0 0	23 0 0	54 0 0	2 0 0	1 0 0	1 0 0	0 0 0	32 0 0	7 1 0	31 0 0	420		
5:30 PM to 5:45 PM	Auto Truck Bus		1 0 0	137 0 0	104 0 0	24 0 0	40 0 0	2 0 0	3 0 0	3 0 0	4 0 0	38 0 0	4 0 0	27 1 0	388		
5:45 PM to 6:00 PM	Auto Truck Bus		4 0 0	156 0 0	84 0 0	27 0 0	56 0 0	1 0 0	6 0 0	4 0 0	3 0 0	29 0 0	3 0 0	18 0 0	391		
Peak Hour Volume (PHV)			9	594	395	98	184	7	13	11	9	128	18	114	1,580		
PHV (by approach)			998			289			33			260					
Peak Hour Factor (PHF)			0.93			0.86			0.63			0.92					
Total Autos			998			289			33			258					
Total Trucks			0			0			0			2					
Total Buses			0			0			0			0					
% Auto			100.0%			100.0%			100.0%			99.2%					
% Heavy Vehicles (Trucks & Buses)			0.0%			0.0%			0.0%			0.8%					

PROJECT: CDC Roybal Campus EIS
 FILE NAME: TMC Summary.xls
 LOCATION: Clairmont Road @ N Decatur Road

COUNT DATE : Enter Here
 WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Clairmont Road (NB)			Clairmont Road (SB)			North Decatur Road (EB)			North Decatur Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R			
4:00 PM to 4:15 PM	Auto Truck Bus		33 0 0	111 1 0	21 0 0	34 0 0	190 1 0	31 1 0	56 1 0	207 5 0	57 2 0	41 0 0	109 6 0	13 0 0	920	3,700	
4:15 PM to 4:30 PM	Auto Truck Bus		27 2 0	144 1 0	18 0 0	39 0 0	187 1 0	31 0 0	59 0 0	204 4 0	56 2 0	41 0 0	91 6 0	17 2 0	932		
4:30 PM to 4:45 PM	Auto Truck Bus		33 0 0	121 2 0	17 0 0	39 0 0	182 3 0	39 1 0	61 0 0	198 6 0	67 0 0	32 0 0	112 4 0	17 0 0	934		
4:45 PM to 5:00 PM	Auto Truck Bus		30 1 0	127 0 0	8 0 0	31 0 0	176 4 0	42 0 0	61 0 0	202 3 0	61 3 0	37 0 0	103 4 0	21 0 0	914		
5:00 PM to 5:15 PM	Auto Truck Bus	1	33 3 0	141 1 0	22 0 0	31 0 0	187 5 0	42 0 0	65 1 0	202 3 0	60 1 0	39 0 0	110 2 0	17 0 0	965		
5:15 PM to 5:30 PM	Auto Truck Bus		32 1 0	163 2 0	14 0 0	33 0 0	189 1 0	43 1 0	61 1 0	206 5 0	58 1 0	39 0 0	125 3 0	11 2 0	991		
5:30 PM to 5:45 PM	Auto Truck Bus		30 1 0	149 1 0	13 0 0	36 0 0	189 0 0	38 0 0	50 1 0	208 4 0	58 1 0	41 0 0	134 1 0	11 1 0	967		
5:45 PM to 6:00 PM	Auto Truck Bus		32 2 0	152 0 0	12 0 0	38 1 0	168 1 0	33 1 0	66 0 0	204 3 0	65 1 0	38 0 0	116 4 0	10 0 0	947		
Peak Hour Volume (PHV)			134	609	61	139	740	158	245	835	245	157	495	52	3,870		
PHV (by approach)			804			1,037			1,325			704					
Peak Hour Factor (PHF)			0.95			0.97			0.98			0.94					
Total Autos			793			1,027			1,303			691					
Total Trucks			11			10			22			13					
Total Buses			0			0			0			0					
% Auto			98.6%			99.0%			98.3%			98.2%					
% Heavy Vehicles (Trucks & Buses)			1.4%			1.0%			1.7%			1.8%					

PROJECT: CDC Roybal Campus EIS
LOCATION: Haygood Drive @ N Decatur Road
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Haygood Drive (NB)			Haygood Drive (SB)			N Decatur Road (EB)			N Decatur Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
4:00 PM to 4:15 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	167 1 0	0 0 0	7 0 0	5 0 0	157 6 0	0 0 0	0 0 0	113 6 0	60 3 0	525	2,066			
4:15 PM to 4:30 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	172 4 0	0 0 0	6 3 0	8 0 0	160 4 0	0 0 0	0 0 0	118 7 0	66 1 0	549				
4:30 PM to 4:45 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	174 3 0	0 0 0	6 1 0	2 0 0	130 6 0	0 0 0	0 0 0	97 5 0	54 1 0	479				
4:45 PM to 5:00 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	161 1 0	0 0 0	6 0 0	4 0 0	171 5 0	0 0 0	0 0 0	98 5 0	61 1 0	513				
5:00 PM to 5:15 PM	Auto Truck Bus	1	0 0 0	0 0 0	0 0 0	169 2 0	0 0 0	10 0 0	1 0 0	179 9 0	0 0 0	0 0 0	143 5 0	55 0 0	573				
5:15 PM to 5:30 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	153 2 0	0 0 0	2 0 0	6 0 0	156 3 0	0 0 0	0 0 0	126 4 0	58 2 0	512				
5:30 PM to 5:45 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	152 0 0	0 0 0	11 0 0	6 0 0	149 5 0	0 0 0	0 0 0	146 5 0	54 0 0	528				
5:45 PM to 6:00 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	170 4 0	0 0 0	11 0 0	5 0 0	146 5 0	0 0 0	0 0 0	123 1 0	47 0 0	512				
Peak Hour Volume (PHV)			0	0	0	652	0	34	18	652	0	0	553	216	2,125				
PHV (by approach)			0			686			670			769							
Peak Hour Factor (PHF)			#DIV/0!			0.93			0.89			0.94							
Total Autos			0			678			648			752							
Total Trucks			0			8			22			17							
Total Buses			0			0			0			0							
% Auto			#DIV/0!			98.8%			96.7%			97.8%							
% Heavy Vehicles (Trucks & Buses)			#DIV/0!			1.2%			3.3%			2.2%							

PROJECT: CDC Roybal Campus EIS

LOCATION: Clifton Road @ N Decatur Road

WEATHER/PAVEMENT: Clear/Dry

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Clifton Road (NB)			Clifton Road (SB)			N Decatur Road (EB)			N Decatur Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
4:00 PM to 4:15 PM	Auto Truck Bus		2 0 0	26 2 0	3 0 0	86 6 0	98 2 0	87 2 0	46 2 0	96 1 0	2 0 0	0 0 0	97 1 0	32 4 0	595	2,304			
4:15 PM to 4:30 PM	Auto Truck Bus		2 0 0	19 0 0	5 0 0	104 4 0	87 0 0	78 4 0	41 1 0	88 0 0	1 0 0	1 0 0	87 3 0	23 3 0	551				
4:30 PM to 4:45 PM	Auto Truck Bus		0 0 0	17 0 0	0 0 0	80 3 0	99 0 0	95 3 0	47 4 0	101 5 0	4 0 0	0 0 0	83 2 0	31 5 0	579				
4:45 PM to 5:00 PM	Auto Truck Bus		1 0 0	17 0 0	8 0 0	80 4 0	110 1 0	91 3 0	39 1 0	111 1 0	13 0 0	0 0 0	66 2 0	27 4 0	579				
5:00 PM to 5:15 PM	Auto Truck Bus	1	2 0 0	21 1 0	6 1 0	98 8 0	103 0 0	95 0 0	36 1 0	95 1 0	6 0 0	1 0 0	79 0 0	39 4 0	597				
5:15 PM to 5:30 PM	Auto Truck Bus		0 0 0	24 0 0	8 0 0	108 1 0	105 1 0	82 2 0	36 1 0	102 3 0	6 0 0	1 0 0	113 2 0	34 2 0	631				
5:30 PM to 5:45 PM	Auto Truck Bus		2 0 0	19 1 0	5 0 0	104 7 0	121 0 0	83 7 0	43 0 0	92 0 0	6 0 0	3 0 0	91 1 0	32 6 0	623				
5:45 PM to 6:00 PM	Auto Truck Bus		1 0 0	34 0 0	4 0 0	82 2 0	111 1 0	80 2 0	44 2 0	101 2 0	16 0 0	0 0 0	101 1 0	40 0 0	624				
Peak Hour Volume (PHV)			5	100	24	410	442	351	163	396	34	5	388	157	2,475				
PHV (by approach)			129			1,203			593			550							
Peak Hour Factor (PHF)			0.83			0.93			0.90			0.90							
Total Autos			126			1,172			583			534							
Total Trucks			3			31			10			16							
Total Buses			0			0			0			0							
% Auto			97.7%			97.4%			98.3%			97.1%							
% Heavy Vehicles (Trucks & Buses)			2.3%			2.6%			1.7%			2.9%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Clifton Road @ Haygood Drive
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Clifton Road (NB)			Clifton Road (SB)			Asbury Circle (EB)			Haygood Drive (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R			
4:00 PM to 4:15 PM	Auto Truck Bus		8 0 0	125 5 0	6 0 0	87 2 0	190 5 0	26 1 0	43 0 0	13 0 0	12 4 0	12 1 0	6 0 0	41 2 0	589	2,282	
4:15 PM to 4:30 PM	Auto Truck Bus		8 0 0	113 7 0	3 1 0	92 0 0	145 5 0	31 0 0	32 0 0	19 0 0	4 4 0	12 0 0	8 0 0	64 1 0	549		
4:30 PM to 4:45 PM	Auto Truck Bus		3 0 0	103 5 0	3 1 0	82 0 0	189 8 0	34 0 0	34 1 0	15 0 0	5 4 0	9 0 0	16 0 0	46 1 0	559		
4:45 PM to 5:00 PM	Auto Truck Bus		8 0 0	110 9 0	8 1 0	72 0 0	181 7 0	34 1 0	31 0 0	11 0 0	10 3 0	9 0 0	15 0 0	75 0 0	585		
5:00 PM to 5:15 PM	Auto Truck Bus	1	7 0 0	140 3 0	4 1 0	86 1 0	228 8 0	47 0 0	44 0 0	20 0 0	6 3 0	6 2 0	5 0 0	47 0 0	658		
5:15 PM to 5:30 PM	Auto Truck Bus		7 0 0	117 6 0	2 1 0	89 1 0	243 5 0	41 0 0	42 2 0	19 0 0	5 2 0	9 1 0	10 0 0	49 0 0	651		
5:30 PM to 5:45 PM	Auto Truck Bus		6 0 0	130 6 0	3 0 0	81 1 0	242 6 0	55 0 0	48 0 0	21 0 0	17 3 0	10 0 0	15 0 0	53 1 0	698		
5:45 PM to 6:00 PM	Auto Truck Bus		8 0 0	130 5 0	1 0 0	68 0 0	196 7 0	59 0 0	57 1 0	17 0 0	9 3 0	7 0 0	15 0 0	54 1 0	638		
Peak Hour Volume (PHV)			28	537	12	327	935	202	194	77	48	35	45	205	2,645	2,645	
PHV (by approach)			577			1,464			319			285					
Peak Hour Factor (PHF)			0.93			0.95			0.90			0.90					
Total Autos			555			1,435			305			280					
Total Trucks			22			29			14			5					
Total Buses			0			0			0			0					
% Auto			96.2%			98.0%			95.6%			98.2%					
% Heavy Vehicles (Trucks & Buses)			3.8%			2.0%			4.4%			1.8%					

PROJECT: CDC Roybal Campus EIS
LOCATION: Clairmont Road @ N Druid Hills Road
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Clairmont Road (NB)			Clairmont Road (SB)			N Druid Hill Road (EB)			N Druid Hill Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R*			
4:00 PM to 4:15 PM	Auto Truck Bus		132 0 0	211 2 0	41 0 0	105 1 0	136 1 0	15 0 0	12 1 0	282 3 0	82 0 0	25 2 0	162 7 0	49 0 0	1,269	5,123	
4:15 PM to 4:30 PM	Auto Truck Bus		137 1 0	219 1 0	44 0 0	90 1 0	167 2 0	17 0 0	18 0 0	265 7 0	97 0 0	20 1 0	153 2 0	40 1 0	1,283		
4:30 PM to 4:45 PM	Auto Truck Bus		128 1 0	219 2 0	40 0 0	97 1 0	133 3 0	12 0 0	22 0 0	278 5 0	104 0 0	16 0 0	162 3 0	41 0 0	1,267		
4:45 PM to 5:00 PM	Auto Truck Bus		139 1 0	212 3 0	50 1 0	102 0 0	153 4 0	13 0 0	18 0 0	278 7 0	122 0 0	15 0 0	137 2 0	47 0 0	1,304		
5:00 PM to 5:15 PM	Auto Truck Bus	1	146 1 0	213 1 0	34 0 0	105 0 0	137 0 0	11 0 0	12 0 0	274 7 0	98 0 0	24 0 0	125 0 0	45 0 0	1,233		
5:15 PM to 5:30 PM	Auto Truck Bus		143 1 0	236 1 0	45 0 0	100 1 0	182 2 0	12 0 0	18 0 0	273 5 0	110 0 0	18 1 0	162 1 0	46 1 0	1,358		
5:30 PM to 5:45 PM	Auto Truck Bus		135 1 0	208 3 0	38 0 0	111 0 0	173 1 0	13 0 0	15 0 0	268 2 0	100 0 0	25 0 0	164 0 0	34 0 0	1,291		
5:45 PM to 6:00 PM	Auto Truck Bus		151 0 0	217 1 0	43 0 0	104 1 0	193 2 0	11 0 0	18 0 0	287 2 0	111 0 0	22 0 0	153 1 0	47 1 0	1,365		
Peak Hour Volume (PHV)			578	880	160	422	690	47	63	1,118	419	90	606	174	5,247		
PHV (by approach)			1,618			1,159			1,600			870					
Peak Hour Factor (PHF)			0.95			0.93			0.96			0.95					
Total Autos			1,609			1,152			1,584			865					
Total Trucks			9			7			16			5					
Total Buses			0			0			0			0					
% Auto			99.4%			99.4%			99.0%			99.4%					
% Heavy Vehicles (Trucks & Buses)			0.6%			0.6%			1.0%			0.6%					

* Changed based on later count

PROJECT: CDC Roybal Campus EIS
LOCATION: Clairmont Road @ LaVista Road
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Clairmont Road (NB)			Clairmont Road (SB)			LaVista Road (EB)			LaVista Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R			
4:00 PM to 4:15 PM	Auto Truck Bus		5 0 0	217 3 0	8 0 0	46 1 0	213 2 0	38 0 0	63 0 0	110 4 0	8 1 0	48 0 0	55 2 0	19 0 0	843	3,487	
4:15 PM to 4:30 PM	Auto Truck Bus		2 0 0	218 1 0	9 0 0	44 1 0	236 1 0	36 0 0	55 0 0	122 4 0	8 0 0	35 0 0	73 1 0	28 0 0	874		
4:30 PM to 4:45 PM	Auto Truck Bus		8 0 0	211 2 0	10 1 0	40 0 0	227 3 1	35 1 0	64 0 0	133 3 0	6 0 0	27 1 0	67 3 1	19 1 0	862		
4:45 PM to 5:00 PM	Auto Truck Bus		2 0 0	199 3 0	6 0 0	53 3 0	266 4 0	65 0 0	53 1 0	122 2 0	6 0 0	29 0 0	71 1 0	22 0 0	908		
5:00 PM to 5:15 PM	Auto Truck Bus	1	5 0 0	198 1 0	11 0 0	62 1 0	244 1 0	47 1 0	54 0 0	131 3 0	5 0 0	29 0 0	68 0 0	16 0 0	877		
5:15 PM to 5:30 PM	Auto Truck Bus		8 0 0	209 2 0	10 0 0	52 0 0	249 2 0	52 0 0	48 0 0	133 1 0	3 0 0	38 1 0	93 1 0	17 0 0	919		
5:30 PM to 5:45 PM	Auto Truck Bus		4 0 0	176 3 0	11 0 0	55 0 0	304 2 0	43 0 0	64 0 0	127 2 0	3 0 0	41 1 0	73 0 0	18 0 0	927		
5:45 PM to 6:00 PM	Auto Truck Bus		2 0 0	207 1 0	12 0 0	44 0 0	313 2 0	54 0 0	62 0 0	130 2 0	4 0 0	47 0 0	81 3 1	20 1 0	985		
Peak Hour Volume (PHV)			19	797	44	214	1,117	197	228	529	15	157	319	72	3,708	3,521	
PHV (by approach)			860			1,528			772			548					
Peak Hour Factor (PHF)			0.94			0.92			0.97			0.90					
Total Autos			853			1,519			764			541					
Total Trucks			7			9			8			7					
Total Buses			0			0			0			0					
% Auto			99.2%			99.4%			99.0%			98.7%					
% Heavy Vehicles (Trucks & Buses)			0.8%			0.6%			1.0%			1.3%					

PROJECT: CDC Roybal Campus EIS
LOCATION: Houston Mill Road @ Clifton Road
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Houston Mill Road (NB)			Houston Mill Road (SB)			Clifton Road (EB)			Clifton Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME	
			L	T	R	L	T	R	L	T	R	L	T	R				
4:00 PM to 4:15 PM	Auto Truck Bus		48 0 0	105 0 0	63 2 0	32 0 0	12 0 0	20 0 0	41 0 0	128 5 0	9 0 0	15 2 0	136 5 0	68 0 0	691	2,882		
4:15 PM to 4:30 PM	Auto Truck Bus		56 0 0	117 0 0	74 2 0	35 0 0	8 0 0	23 1 0	45 0 0	118 4 0	6 0 0	7 2 0	122 6 0	71 1 0	698			
4:30 PM to 4:45 PM	Auto Truck Bus		59 1 0	95 0 0	78 2 0	38 0 0	11 0 0	27 0 0	62 1 0	137 6 0	17 0 0	8 2 0	113 3 0	50 2 0	712			
4:45 PM to 5:00 PM	Auto Truck Bus		86 0 0	105 0 0	93 2 0	33 1 0	9 0 0	29 0 0	55 2 0	129 6 0	16 0 0	17 1 0	116 10 0	71 0 0	781			
5:00 PM to 5:15 PM	Auto Truck Bus	1	56 0 0	100 0 0	86 1 0	51 0 0	9 0 0	24 0 0	59 0 0	178 3 0	13 0 0	11 1 0	123 1 0	76 0 0	792			
5:15 PM to 5:30 PM	Auto Truck Bus		44 0 0	85 0 0	76 1 0	57 0 0	2 0 0	33 0 0	45 0 0	159 3 0	13 0 0	8 1 0	127 4 0	83 0 0	741			
5:30 PM to 5:45 PM	Auto Truck Bus		72 0 0	95 0 0	77 2 0	42 0 0	14 0 0	16 0 0	67 0 0	185 4 0	19 0 0	19 1 0	124 5 0	65 0 0	807			
5:45 PM to 6:00 PM	Auto Truck Bus		55 0 0	72 0 0	54 2 0	48 0 0	10 0 0	19 0 0	61 0 0	177 4 0	14 0 0	8 3 0	126 1 0	74 1 0	729			
Peak Hour Volume (PHV)			227	352	299	198	35	92	232	713	59	52	511	299	3,069			
PHV (by approach)			878			325			1,004			862						
Peak Hour Factor (PHF)			0.89			0.88			0.91			0.97						
Total Autos			872			325			990			844						
Total Trucks			6			0			14			18						
Total Buses			0			0			0			0						
% Auto			99.3%			100.0%			98.6%			97.9%						
% Heavy Vehicles (Trucks & Buses)			0.7%			0.0%			1.4%			2.1%						

PROJECT: CDC Roybal Campus EIS
LOCATION: Houston Mill Road @ LaVista Road
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Houston Mill Road (NB)			Houston Mill Road (SB)			LaVista Road (EB)			LaVista Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
4:00 PM to 4:15 PM	Auto Truck Bus		30 0 0	0 0 0	133 1 0	0 0 0	0 0 0	0 0 0	0 0 0	163 2 0	14 0 0	30 1 0	103 3 0	0 0 0	480	2,076			
4:15 PM to 4:30 PM	Auto Truck Bus		31 1 0	0 0 0	128 1 0	0 0 0	0 0 0	0 0 0	0 0 0	133 5 0	23 2 0	31 0 0	132 6 0	0 0 0	493				
4:30 PM to 4:45 PM	Auto Truck Bus		21 1 0	0 0 0	140 3 0	0 0 0	0 0 0	0 0 0	0 2 0	183 2 0	28 0 0	44 1 0	129 2 0	0 0 0	554				
4:45 PM to 5:00 PM	Auto Truck Bus		37 0 0	0 0 0	131 1 0	0 0 0	0 0 0	0 0 0	0 3 0	175 3 0	31 0 0	39 0 0	128 4 0	0 0 0	549				
5:00 PM to 5:15 PM	Auto Truck Bus	1	37 0 0	0 0 0	138 0 0	0 0 0	0 0 0	0 0 0	0 5 0	205 5 0	35 0 0	38 0 0	110 0 0	0 0 0	568				
5:15 PM to 5:30 PM	Auto Truck Bus		33 0 0	0 0 0	170 0 0	0 0 0	0 0 0	0 0 0	0 4 0	188 4 0	21 0 0	51 0 0	119 1 0	0 0 0	587				
5:30 PM to 5:45 PM	Auto Truck Bus		31 0 0	0 0 0	155 0 0	0 0 0	0 0 0	0 0 0	0 3 0	165 3 0	33 0 0	45 0 0	129 0 0	0 0 0	561				
5:45 PM to 6:00 PM	Auto Truck Bus		29 0 0	0 0 0	130 0 0	0 0 0	0 0 0	0 0 0	0 1 0	164 1 0	37 0 0	43 0 0	152 5 0	0 0 0	561				
Peak Hour Volume (PHV)			130	0	593	0	0	0	0	735	126	177	516	0	2,277				
PHV (by approach)			723			0			861			693							
Peak Hour Factor (PHF)			0.89			#DIV/0!			0.88			0.87							
Total Autos			723			0			848			687							
Total Trucks			0			0			13			6							
Total Buses			0			0			0			0							
% Auto			100.0%			#DIV/0!			98.5%			99.1%							
% Heavy Vehicles (Trucks & Buses)			0.0%			#DIV/0!			1.5%			0.9%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Briarcliff Road @ Shephards Lane
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Briarcliff Road (NB)			Briarcliff Road (SB)			Shepards Lane (EB)			Shepards Lane (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R			
4:00 PM to 4:15 PM	Auto Truck Bus		129 1 0	224 9 0	0 0 0	0 0 0	184 5 0	5 0 0	2 0 0	0 0 0	47 0 0	0 0 0	0 0 0	606	2,496		
4:15 PM to 4:30 PM	Auto Truck Bus		111 1 0	221 4 0	0 0 0	0 0 0	178 7 0	5 0 0	11 0 0	0 0 0	48 2 0	0 0 0	0 0 0	588			
4:30 PM to 4:45 PM	Auto Truck Bus		115 1 0	223 5 0	0 0 0	0 0 0	234 4 0	5 0 0	4 0 0	0 0 0	70 2 0	0 0 0	0 0 0	663			
4:45 PM to 5:00 PM	Auto Truck Bus		105 0 0	205 5 0	0 0 0	0 0 0	246 3 0	7 0 0	4 0 0	0 0 0	64 0 0	0 0 0	0 0 0	639			
5:00 PM to 5:15 PM	Auto Truck Bus	1	89 0 0	228 5 0	0 0 0	0 0 0	247 3 0	9 0 0	6 0 0	0 0 0	65 2 0	0 0 0	0 0 0	654			
5:15 PM to 5:30 PM	Auto Truck Bus		103 0 0	171 2 0	0 0 0	0 0 0	222 5 0	9 0 0	6 0 0	0 0 0	74 0 0	0 0 0	0 0 0	592			
5:30 PM to 5:45 PM	Auto Truck Bus		64 2 0	95 3 0	0 0 0	0 0 0	253 2 0	3 0 0	2 0 0	0 0 0	67 0 0	0 0 0	0 0 0	491			
5:45 PM to 6:00 PM	Auto Truck Bus		106 0 0	239 6 0	0 0 0	0 0 0	237 3 0	8 0 0	5 0 0	0 0 0	86 0 0	0 0 0	0 0 0	690			
Peak Hour Volume (PHV)			364	749	0	0	972	29	19	0	294	0	0	0	2,427		
PHV (by approach)			1,113			1,001			313			0					
Peak Hour Factor (PHF)			0.79			0.97			0.86			#DIV/0!					
Total Autos			1,095			988			311			0					
Total Trucks			18			13			2			0					
Total Buses			0			0			0			0					
% Auto			98.4%			98.7%			99.4%			#DIV/0!					
% Heavy Vehicles (Trucks & Buses)			1.6%			1.3%			0.6%			#DIV/0!					

PROJECT: CDC Roybal Campus EIS
LOCATION: Briarcliff Road @ Johnson-Zonolite Road
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Briarcliff Road (NB)			Briarcliff Road (SB)			Johnson-Zonolite Rd (EB)			Johnson-Zonolite Rd (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R			
4:00 PM to 4:15 PM	Auto Truck Bus		9 3 0	111 2 0	8 0 0	14 1 0	116 2 0	93 1 0	60 2 0	12 0 0	12 1 0	17 0 0	15 0 0	12 0 0	491	2,062	
4:15 PM to 4:30 PM	Auto Truck Bus		6 1 0	99 2 0	6 1 0	13 0 0	122 5 0	85 4 0	72 2 0	23 0 0	6 2 0	15 0 0	25 0 0	4 0 0	493		
4:30 PM to 4:45 PM	Auto Truck Bus		9 1 0	111 3 0	3 0 0	14 0 0	154 2 0	115 2 0	81 2 0	13 0 1	11 0 0	18 0 0	17 0 0	2 0 0	559		
4:45 PM to 5:00 PM	Auto Truck Bus		9 0 0	97 2 0	9 0 0	5 0 0	153 2 0	109 2 0	59 2 0	10 0 0	16 0 0	15 0 0	23 0 0	6 0 0	519		
5:00 PM to 5:15 PM	Auto Truck Bus	1	8 0 0	115 2 0	2 1 0	8 0 0	167 1 0	125 2 0	80 3 0	14 0 0	6 1 0	16 0 0	27 0 0	0 0 0	578		
5:15 PM to 5:30 PM	Auto Truck Bus		10 0 0	123 1 0	7 0 0	13 0 0	158 2 0	135 1 0	73 2 0	16 0 0	7 0 0	9 0 0	18 0 0	6 0 0	581		
5:30 PM to 5:45 PM	Auto Truck Bus		8 1 0	44 0 0	6 0 0	23 0 0	146 1 0	120 0 0	80 1 0	14 0 0	3 0 0	21 0 0	35 1 0	16 0 0	520		
5:45 PM to 6:00 PM	Auto Truck Bus		7 1 0	152 2 1	2 1 0	22 0 0	152 1 2	109 2 0	98 1 0	18 0 0	4 0 0	14 0 0	34 0 0	11 0 0	631		
Peak Hour Volume (PHV)			35	439	19	66	628	494	338	62	21	60	115	33	2,310	2,310	
PHV (by approach)			493			1,188			421			208					
Peak Hour Factor (PHF)			0.75			0.96			0.87			0.71					
Total Autos			484			1,178			413			207					
Total Trucks			9			10			8			1					
Total Buses			0			0			0			0					
% Auto			98.2%			99.2%			98.1%			99.5%					
% Heavy Vehicles (Trucks & Buses)			1.8%			0.8%			1.9%			0.5%					

PROJECT: CDC Roybal Campus EIS
 FILE NAME: TMC Summary.xls
 LOCATION: Houston Mill Road @ CDC Entrance

COUNT DATE : Enter Here
 WEATHER/PAVEMENT: Clear/Dry
 Recounted from original counts in 2012. Not new counts!

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Briar Cliff Road (NB)			Briar Cliff Road (SB)			CDC Entrance (EB)			0 (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R			
4:00 PM to 4:15 PM	Auto Truck Bus		0 0 0	62 2 0	5 0 0	9 0 0	2 0 0	4 0 0	106 0 0	0 0 0	15 0 0	0 0 0	0 0 0	15 0 0	220	854	
4:15 PM to 4:30 PM	Auto Truck Bus		0 0 0	60 2 0	0 0 0	6 0 0	2 1 0	4 0 0	86 0 0	0 0 0	8 0 0	0 0 0	0 0 0	12 0 0	181		
4:30 PM to 4:45 PM	Auto Truck Bus		0 0 0	90 3 0	0 0 0	10 0 0	5 0 0	2 0 0	93 0 0	0 0 0	11 0 0	0 0 0	0 0 0	20 0 0	234		
4:45 PM to 5:00 PM	Auto Truck Bus		1 0 0	75 2 0	0 0 0	7 0 0	3 0 0	2 0 0	108 0 0	0 0 0	8 0 0	0 0 0	0 0 0	13 0 0	219		
5:00 PM to 5:15 PM	Auto Truck Bus	1	0 0 0	65 0 0	0 0 0	4 0 0	2 0 0	3 0 0	92 0 0	0 0 0	6 0 0	0 0 0	0 0 0	22 0 0	194		
5:15 PM to 5:30 PM	Auto Truck Bus		0 0 0	77 0 0	0 0 0	7 0 0	3 0 0	0 0 0	84 0 0	0 0 0	16 0 0	0 0 0	0 0 0	13 0 0	200		
5:30 PM to 5:45 PM	Auto Truck Bus		0 0 0	62 0 0	1 0 0	4 0 0	5 0 0	1 0 0	60 0 0	0 0 0	12 0 0	0 0 0	0 0 0	11 0 0	156		
5:45 PM to 6:00 PM	Auto Truck Bus		0 0 0	53 0 0	0 0 0	4 0 0	0 0 0	2 0 0	61 0 0	0 0 0	2 0 0	0 0 0	0 0 0	6 0 0	128		
Peak Hour Volume (PHV)			0	257	1	19	10	6	297	0	36	0	0	52	678		
PHV (by approach)			258			35			333			52					
Peak Hour Factor (PHF)			0.84			0.88			0.83			0.59					
Total Autos			258			35			333			52					
Total Trucks			0			0			0			0					
Total Buses			0			0			0			0					
% Auto			100.0%			100.0%			100.0%			100.0%					
% Heavy Vehicles (Trucks & Buses)			0.0%			0.0%			0.0%			0.0%					

Peds

PROJECT: CDC Roybal Campus EIS
LOCATION: CDC Entrance @ Clifton Road
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	CDC Entrance (NB)			CDC Entrance (SB)			Clifton Road (EB)			Clifton Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
4:00 PM to 4:15 PM	Auto Truck Bus		81 0 0	0 0 0	55 1 0	0 0 0	1 0 0	5 1 0	10 0 0	117 5 0	15 0 0	6 0 0	212 7 0	1 0 0	517	2,093			
4:15 PM to 4:30 PM	Auto Truck Bus		105 0 0	0 0 0	49 0 0	2 0 0	0 0 0	2 1 0	4 0 0	104 1 0	9 0 0	13 0 0	157 5 0	4 0 0	456				
4:30 PM to 4:45 PM	Auto Truck Bus		85 0 0	0 0 0	44 0 0	1 0 0	0 0 0	3 0 0	12 1 0	160 6 0	14 1 0	12 0 0	222 3 0	3 0 0	567				
4:45 PM to 5:00 PM	Auto Truck Bus		98 0 0	0 0 0	53 1 0	0 0 0	0 0 0	6 0 0	11 0 0	134 4 0	12 1 0	14 0 0	211 6 0	2 0 0	553				
5:00 PM to 5:15 PM	Auto Truck Bus	1	94 0 0	1 0 0	56 0 0	3 0 0	1 0 0	7 1 0	4 0 0	156 5 0	15 0 0	15 0 0	196 2 0	1 0 0	557				
5:15 PM to 5:30 PM	Auto Truck Bus		121 0 0	0 0 0	57 1 0	3 0 0	0 0 0	1 0 0	4 0 0	180 5 0	5 0 0	10 0 0	216 0 0	1 0 0	604				
5:30 PM to 5:45 PM	Auto Truck Bus		98 1 0	0 0 0	47 1 0	4 0 0	0 0 0	8 0 0	3 0 0	152 2 0	9 1 0	12 0 0	180 6 0	2 0 0	526				
5:45 PM to 6:00 PM	Auto Truck Bus		73 0 0	0 0 0	39 0 0	5 0 0	0 0 0	6 0 0	2 0 0	173 5 0	9 0 0	12 0 0	150 1 0	5 0 0	480				
Peak Hour Volume (PHV)			387	1	201	15	1	23	13	678	39	49	751	9	2,167				
PHV (by approach)			589			39			730			809							
Peak Hour Factor (PHF)			0.82			0.81			0.94			0.89							
Total Autos			586			38			712			800							
Total Trucks			3			1			18			9							
Total Buses			0			0			0			0							
% Auto			99.5%			97.4%			97.5%			98.9%							
% Heavy Vehicles (Trucks & Buses)			0.5%			2.6%			2.5%			1.1%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Emory Conference Center @ Clifton Road
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Emory Conf Ctr (NB)			Emory Conf Ctr (SB)			Clifton Road (EB)			Clifton Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
4:00 PM to 4:15 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	20 0 0	0 0 0	17 0 0	9 0 0	184 4 0	0 0 0	0 0 0	203 6 0	7 1 0	451	1,781			
4:15 PM to 4:30 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	22 3 0	0 0 0	17 0 0	4 0 0	162 5 0	0 0 0	0 0 0	193 5 0	8 1 0	420				
4:30 PM to 4:45 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	22 2 0	0 0 0	22 0 0	3 0 0	174 6 0	0 0 0	0 0 0	188 2 0	11 2 0	432				
4:45 PM to 5:00 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	33 0 0	0 0 0	21 0 0	6 0 0	189 5 0	0 0 0	0 0 0	207 6 0	10 1 0	478				
5:00 PM to 5:15 PM	Auto Truck Bus	1	0 0 0	0 0 0	0 0 0	35 2 0	0 0 0	21 0 0	4 0 0	205 7 0	0 0 0	0 0 0	188 4 0	11 0 0	477				
5:15 PM to 5:30 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	40 1 0	0 0 0	27 0 0	4 1 0	176 5 0	0 0 0	0 0 0	212 1 0	8 1 0	476				
5:30 PM to 5:45 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	32 0 0	0 0 0	33 1 0	9 0 0	202 4 0	0 0 0	0 0 0	227 5 0	10 1 0	524				
5:45 PM to 6:00 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	30 1 0	0 0 0	27 0 0	11 0 0	173 3 0	0 0 0	0 0 0	208 2 0	13 0 0	468				
Peak Hour Volume (PHV)			0	0	0	141	0	109	29	775	0	0	847	44	1,945				
PHV (by approach)			0			250			804			891							
Peak Hour Factor (PHF)			#DIV/0!			0.92			0.93			0.92							
Total Autos			0			245			784			877							
Total Trucks			0			5			20			14							
Total Buses			0			0			0			0							
% Auto			#DIV/0!			98.0%			97.5%			98.4%							
% Heavy Vehicles (Trucks & Buses)			#DIV/0!			2.0%			2.5%			1.6%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Emory Conference Center (Hotel) @ Clifton Road
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Emory Conf Ctr (Hotel) (NB)			Emory Conf Ctr (Hotel) (SB)			Clifton Road (EB)			Clifton Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME		
			L	T	R	L	T	R	L	T	R	L	T	R					
4:00 PM to 4:15 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	2 0 0	0 0 0	4 2 0	0 0 0	166 9 0	0 0 0	0 0 0	203 4 0	2 0 0	392	1,656			
4:15 PM to 4:30 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	1 0 0	0 0 0	6 0 0	1 0 0	167 1 0	0 0 0	0 0 0	199 6 0	2 0 0	383				
4:30 PM to 4:45 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	1 0 0	0 0 0	5 0 0	1 0 0	191 7 0	0 0 0	0 0 0	207 3 0	0 0 0	415				
4:45 PM to 5:00 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	1 0 0	0 0 0	1 0 0	2 0 0	198 5 0	0 0 0	0 0 0	247 7 0	5 0 0	466				
5:00 PM to 5:15 PM	Auto Truck Bus	1	0 0 0	0 0 0	0 0 0	1 0 0	0 0 0	1 0 0	1 0 0	233 6 0	0 0 0	0 0 0	202 1 0	4 0 0	449				
5:15 PM to 5:30 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	7 0 0	1 0 0	216 2 0	0 0 0	0 0 0	226 3 0	1 0 0	456				
5:30 PM to 5:45 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	3 0 0	0 0 0	3 0 0	2 0 0	208 2 0	0 0 0	0 0 0	213 4 0	2 0 0	437				
5:45 PM to 6:00 PM	Auto Truck Bus		0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	4 0 0	1 0 0	228 4 0	0 0 0	0 0 0	193 1 0	6 0 0	437				
Peak Hour Volume (PHV)			0	0	0	4	0	15	5	899	0	0	843	13	1,779				
PHV (by approach)			0			19			904			856							
Peak Hour Factor (PHF)			#DIV/0!			0.68			0.94			0.93							
Total Autos			0			19			890			847							
Total Trucks			0			0			14			9							
Total Buses			0			0			0			0							
% Auto			#DIV/0!			100.0%			98.5%			98.9%							
% Heavy Vehicles (Trucks & Buses)			#DIV/0!			0.0%			1.5%			1.1%							

PROJECT: CDC Roybal Campus EIS
LOCATION: Clifton Road @ Briarcliff Way
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Clifton Road (NB)			Clifton Road (SB)			Old Briarcliff Way (EB)			Old Briarcliff Way (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R			
4:00 PM to 4:15 PM	Auto Truck Bus		46 0 0	241 7 0	11 1 0	6 0 0	93 5 0	1 0 0	2 0 0	4 1 0	17 0 0	19 1 0	7 0 0	17 0 0	479	1,974	
4:15 PM to 4:30 PM	Auto Truck Bus		34 0 0	244 3 0	12 1 0	3 0 0	101 1 0	2 0 0	0 0 0	3 0 0	11 0 0	19 0 0	10 1 0	15 0 0	460		
4:30 PM to 4:45 PM	Auto Truck Bus		46 0 0	238 4 0	8 0 0	5 0 0	123 6 0	2 0 0	2 0 0	6 0 0	18 0 0	18 1 0	12 0 0	17 0 0	506		
4:45 PM to 5:00 PM	Auto Truck Bus		40 0 0	257 4 0	12 2 0	5 0 0	135 4 0	0 0 0	3 0 0	6 0 0	23 0 0	10 2 0	10 0 0	16 0 0	529		
5:00 PM to 5:15 PM	Auto Truck Bus	1	44 0 0	253 4 0	23 1 0	4 0 0	138 5 0	2 0 0	3 0 0	5 0 0	14 1 0	18 1 0	9 0 0	14 0 0	539		
5:15 PM to 5:30 PM	Auto Truck Bus		62 0 0	225 0 0	17 0 0	2 0 0	123 3 0	1 0 0	4 0 0	4 0 0	19 0 0	15 0 0	9 0 0	18 0 0	502		
5:30 PM to 5:45 PM	Auto Truck Bus		60 1 0	148 3 0	12 1 0	5 0 0	116 1 0	2 0 0	4 0 0	12 0 0	14 0 0	12 0 0	9 0 0	11 0 0	411		
5:45 PM to 6:00 PM	Auto Truck Bus		70 0 0	167 2 0	24 1 0	2 0 0	134 2 0	3 0 0	5 0 0	3 0 0	28 2 0	12 1 0	8 0 0	7 0 0	471		
Peak Hour Volume (PHV)			237	802	79	13	522	8	16	24	78	59	35	50	1,923	1,923	
PHV (by approach)			1,118			543			118			144					
Peak Hour Factor (PHF)			0.86			0.91			0.78			0.86					
Total Autos			1,105			532			115			142					
Total Trucks			13			11			3			2					
Total Buses			0			0			0			0					
% Auto			98.8%			98.0%			97.5%			98.6%					
% Heavy Vehicles (Trucks & Buses)			1.2%			2.0%			2.5%			1.4%					

PROJECT: CDC Roybal Campus EIS
LOCATION: Clifton Road @ Gatewood Road
TIME PERIOD: PM

TURNING MOVEMENT COUNT SUMMARY

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START OF PEAK HOUR	Clifton Road (NB)			Clifton Road (SB)			Gatewood Road (EB)			Gatewood Road (WB)			15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY VOLUME
			L	T	R	L	T	R	L	T	R	L	T	R			
4:00 PM to 4:15 PM	Auto Truck Bus		2 0 0	198 5 0	15 1 0	3 1 0	224 8 0	1 0 0	2 0 0	1 0 0	1 0 0	46 1 0	0 0 0	11 1 0	521	2,045	
4:15 PM to 4:30 PM	Auto Truck Bus		1 0 0	183 7 0	18 3 0	1 0 0	223 6 0	1 0 0	1 0 0	0 0 0	4 0 0	18 0 0	2 0 0	9 2 0	479		
4:30 PM to 4:45 PM	Auto Truck Bus		5 0 0	158 5 0	17 1 0	4 0 0	249 9 0	5 0 0	2 0 0	3 0 0	5 0 0	27 0 0	0 0 0	18 1 0	509		
4:45 PM to 5:00 PM	Auto Truck Bus		3 0 0	203 8 0	17 0 0	5 0 0	232 9 0	0 0 0	3 0 0	0 0 0	6 0 0	35 0 0	1 0 0	12 2 0	536		
5:00 PM to 5:15 PM	Auto Truck Bus	1	4 0 0	200 2 0	23 0 0	2 0 0	289 6 0	5 0 0	2 0 0	1 0 0	12 0 0	24 1 0	0 0 0	12 0 0	583		
5:15 PM to 5:30 PM	Auto Truck Bus		3 1 0	193 8 0	23 1 0	6 0 0	283 5 0	3 0 0	1 0 0	0 0 0	9 1 0	37 0 0	1 0 0	9 0 0	584		
5:30 PM to 5:45 PM	Auto Truck Bus		2 0 0	188 6 0	17 0 0	9 0 0	309 6 0	3 0 0	4 0 0	2 0 0	8 0 0	40 1 0	0 0 0	9 0 0	604		
5:45 PM to 6:00 PM	Auto Truck Bus		3 0 0	217 7 0	27 0 0	11 0 0	267 7 0	3 0 0	3 0 0	0 0 0	3 0 0	28 1 0	0 0 0	7 0 0	584		
Peak Hour Volume (PHV)			13	821	91	28	1,172	14	10	3	33	132	1	37	2,355		
PHV (by approach)			925			1,214			46			170					
Peak Hour Factor (PHF)			0.91			0.93			0.77			0.85					
Total Autos			900			1,190			45			167					
Total Trucks			25			24			1			3					
Total Buses			0			0			0			0					
% Auto			97.3%			98.0%			97.8%			98.2%					
% Heavy Vehicles (Trucks & Buses)			2.7%			2.0%			2.2%			1.8%					

Appendix C

Air Quality

Parking Deck, Running and Idling Emission Rates, CDC Employee Fleet

Pollutant	Temperature	Year	MPH	Fuel	Vehicle Type	Unit Emission Rate	Fleet Mix	Fleet Emission Rate	Bulk Emission Rate
Carbon Monoxide	Under 70	2025	15	Gasoline	Motorcycle	15.54	0.30%	0.0466	3.46 grams/mile
					Passenger Car	3.34	88.09%	2.9394	
					Passenger Truck	4.22	11.29%	0.4765	
			0	Gasoline	Motorcycle	112.01	0.30%	0.3360	5.85 grams/vehicle hour
					Passenger Car	4.13	88.09%	3.6374	
					Passenger Truck	16.53	11.29%	1.8665	

Parking Deck, Vehicle Start Emission Rates, CDC Employee Fleet

Pollutant	Temperature	Year	Fuel	Vehicle Type	Fleet Mix	Hourly Emission Rate	Bulk Emission Rate (tons/hour)
Carbon Monoxide	60	2025	Gasoline	Motorcycle	0.30%	69	0.0278
				Passenger Car	88.09%	23,023	
				Passenger Truck	11.29%	4,694	
Carbon Dioxide Equivalent	90			Motorcycle	0.30%	3,454	0.3852
				Passenger Car	88.09%	280,326	
				Passenger Truck	11.29%	101,385	
Oxides of Nitrogen	90			Motorcycle	0.30%	3	0.0007
				Passenger Car	88.09%	599	
				Passenger Truck	11.29%	119	
Volatile Organic Compounds	90			Motorcycle	0.30%	14	0.0013
				Passenger Car	88.09%	1,130	
				Passenger Truck	11.29%	135	

Regional Commutes, Running Emission Rates, CDC Employee Fleet

Pollutant	Temperature	Year	MPH	Fuel	Vehicle Type	Unit Emission Rate	Fleet Mix	Fleet Emission Rate	Bulk Emission Rate (grams/mile)	
Oxides of Nitrogen	90	2012	35	CNG	Transit Bus	4.00	2.16%	0.0863	0.63	0.62
				Diesel	Light Commercial Truck	3.31	4.32%	0.1430		
				Gasoline	Motorcycle	0.52	0.43%	0.0022		
					Passenger Car	0.38	83.52%	0.3139		
					Passenger Truck	0.92	9.57%	0.0879		
			55	CNG	Transit Bus	4.49	2.16%	0.0970	0.61	
				Diesel	Light Commercial Truck	2.55	4.32%	0.1103		
				Gasoline	Motorcycle	0.67	0.43%	0.0029		
					Passenger Car	0.37	83.52%	0.3130		
					Passenger Truck	0.96	9.57%	0.0915		
		2025	35	CNG	Transit Bus	3.39	2.16%	0.0731	0.25	0.25
				Diesel	Light Commercial Truck	1.09	4.32%	0.0469		
				Gasoline	Motorcycle	0.45	0.43%	0.0020		
					Passenger Car	0.12	83.52%	0.1027		
					Passenger Truck	0.25	9.57%	0.0239		
			55	CNG	Transit Bus	3.83	2.16%	0.0827	0.25	
				Diesel	Light Commercial Truck	0.81	4.32%	0.0352		
				Gasoline	Motorcycle	0.59	0.43%	0.0025		
					Passenger Car	0.13	83.52%	0.1068		
					Passenger Truck	0.27	9.57%	0.0258		
Oxides of Nitrogen	90	2025	35	Gasoline	Motorcycle	0.45	0.30%	0.0014	0.14	0.14
					Passenger Car	0.12	88.09%	0.1083		
					Passenger Truck	0.25	11.29%	0.0281		
			55		Motorcycle	0.59	0.30%	0.0018	0.14	
					Passenger Car	0.13	88.09%	0.1126		
					Passenger Truck	0.27	11.29%	0.0305		

Pollutant	Temperature	Year	MPH	Fuel	Vehicle Type	Unit Emission Rate	Fleet Mix	Fleet Emission Rate	Bulk Emission Rate (grams/mile)	
Volatile Organic Compounds		2012	35	Diesel	Light Commercial Truck	0.53	4.32%	0.0229	0.23	0.20
				Gasoline	Motorcycle	0.50	0.43%	0.0066		
					Passenger Car	0.20	83.52%	0.1678		
					Passenger Truck	0.36	9.57%	0.0342		
			55	Diesel	Light Commercial Truck	0.41	4.32%	0.0176	0.18	
				Gasoline	Motorcycle	1.20	0.43%	0.0052		
					Passenger Car	0.15	83.52%	0.1292		
					Passenger Truck	0.27	9.57%	0.0260		
Volatile Organic Compounds	90	2025	35	Diesel	Light Commercial Truck	0.08	4.32%	0.0034	0.10	0.09 grams/mile
				Gasoline	Motorcycle	1.19	0.43%	0.0051		
					Passenger Car	0.09	83.52%	0.0792		
					Passenger Truck	0.12	9.57%	0.0111		
			55	Diesel	Light Commercial Truck	0.06	4.32%	0.0026	0.08	
				Gasoline	Motorcycle	0.90	0.43%	0.0039		
					Passenger Car	0.08	83.52%	0.0658		
					Passenger Truck	0.09	9.57%	0.0085		
			35	Gasoline	Motorcycle	1.19	0.30%	0.0036	0.10	0.09
					Passenger Car	0.09	88.09%	0.0835		
					Passenger Truck	0.12	11.29%	0.0131		
			55		Motorcycle	0.90	0.30%	0.0027	0.08	
					Passenger Car	0.08	88.09%	0.0694		
					Passenger Truck	0.09	11.29%	0.0100		

Local Intersections, Idle and Running Emission Rates, GAEPD Vehicle Fleet (used in regional conformity analysis)

Pollutant	Temperature	Year	MPH	Fuel	Vehicle Type	Unit Emission Rate	Fleet Mix	Fleet Emission Rate	Bulk Emission Rate
Carbon Monoxide	Under 70	2025	35	Gasoline	Transit Bus	17.79	0.02%	0.0035	2.42 grams/mile
				Diesel	Combination Long-haul Truck	1.05	0.36%	0.0038	
					Combination Short-haul Truck	0.98	0.64%	0.0063	
					Intercity Bus	0.50	0.03%	0.0002	
					Light Commercial Truck	0.80	10.09%	0.0802	
					Motor Home	0.78	0.13%	0.0010	
					Refuse Truck	0.88	0.04%	0.0003	
					School Bus	0.41	0.33%	0.0014	
					Single Unit Long-haul Truck	0.70	0.09%	0.0006	
					Single Unit Short-haul Truck	0.78	1.27%	0.0099	
				Gasoline	Motorcycle	12.67	2.10%	0.2659	
					Passenger Car	2.10	54.01%	1.1328	
					Passenger Truck	2.95	30.88%	0.9117	
			0	Gasoline	Transit Bus	19.11	0.02%	0.0038	10.91 grams/vehicle hour
				Diesel	Combination Long-haul Truck	8.13	0.36%	0.0293	
					Combination Short-haul Truck	7.87	0.64%	0.0504	
					Intercity Bus	5.29	0.03%	0.0017	
					Light Commercial Truck	9.90	10.09%	0.9990	
					Motor Home	7.77	0.13%	0.0099	
					Refuse Truck	7.54	0.04%	0.0030	
					School Bus	6.14	0.33%	0.0206	
					Single Unit Long-haul Truck	7.29	0.09%	0.0065	
					Single Unit Short-haul Truck	7.80	1.27%	0.0991	
				Gasoline	Motorcycle	112.01	2.10%	2.3512	
					Passenger Car	4.13	54.01%	2.2304	
					Passenger Truck	16.53	30.88%	5.1054	

Facility Wide Emissions Summary

Group Description	Total Maximum Potential Emissions ⁸ (tpy)					
	NO _x	SO ₂	CO	PM	VOC	HAP ⁹
Boilers ^{1,2}	88.21	290.42	106.51	15.23	5.12	1.76
Generators ^{3,4,5,6}	49.68	8.01	18.32	1.81	2.21	0.10
Incinerators ⁷	7.86	1.74	2.42	0.98	0.17	0.35
Total	145.75	300.17	127.26	18.01	7.50	2.21
Title V Major Source Threshold	25	100	100	100	25	25
Title V Major Source?	Yes	Yes	Yes	No	No	No

1. Includes BL02, BL03, BL04, BL07, BL08, BL09 and BL10.

2. Total NO_x emissions from BL04, BL07, BL10 are limited to 16 tpy (10 tpy for Boilers 4, 7 combined and 6 tpy for Boiler 10 only).

3. Includes all generators from CG01 - CG17.

4. Total NO_x emissions from CG03 - CG06 are limited to 15 tpy.

5. Total NO_x emissions from CG10 - CG14 are limited to 9 tpy.

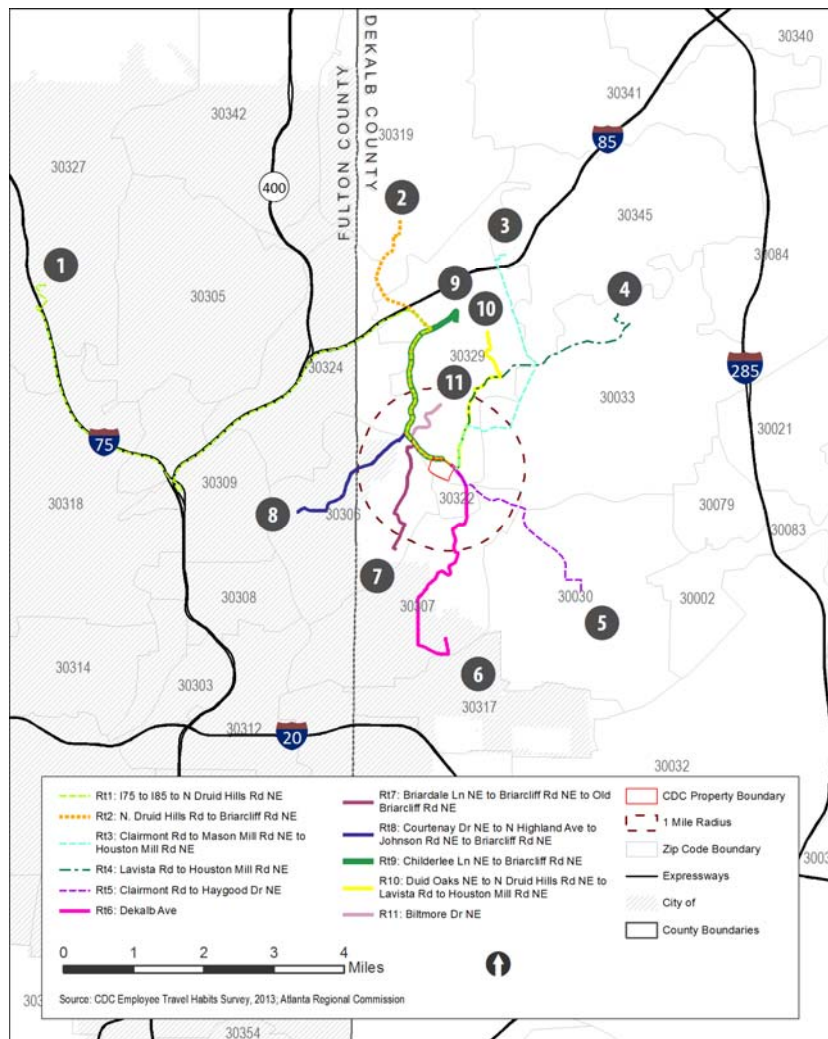
6. Total NO_x emissions from CG15 - CG17 are limited to 6 tpy.

7. Includes INC1, INC2 and INC3.

8. The facility wide emissions do not include emissions from insignificant emission sources.

9. CDC is a minor source of HAP, since the total HAP (and the single HAP) is below the 25 tpy (and 10 tpy) threshold.

Source: Title V Operating Permit Renewal Application, Trinity Consultants, 2008



Regional VMT, 2013 Commute Patterns

Commute	Distance (miles)	% on Route	# of Employees		
			Existing	No Build	Build
Route 1	11.6	14%	768	893	984
Route 2	4.5	6%	324	377	415
Route 3	4.4	11%	606	704	776
Route 4	4.4	8%	450	523	576
Route 5	3.2	19%	1026	1193	1315
Route 6	3.9	14%	732	851	938
Route 7	2.3	2%	108	126	139
Route 8	2.5	7%	378	439	484
Route 9	3.0	2%	132	153	169
Route 10	2.7	4%	222	258	284
Route 11	1.4	11%	564	656	723
Total VMT			48,205	56,040	61,755

Appendix D

Noise

Site Map

- bird tweets but traffic constantly louder
- Both EB/WB backed up to idles, monitor parked during these times
- Traffic on Blithmore was very slow and usually queued. Acceleration rate. Clifton is not audible, therefore not counted
- Site is next to residential porch
- Site is higher in elevation to road, and separated by ditch

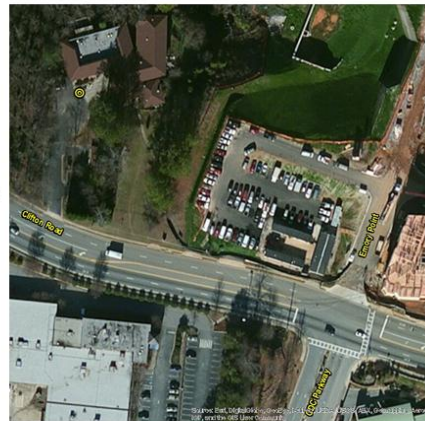


Location: Milledge Rd/Clifton please note any line-of-sight obstructions					Vehicle Speed: varies		Surface Type:		Temperature: 55		Wind:		
Date	Time Start	Duration	Leq	L10	L50	L90	Lmax	Record #	NB/SB EB/WB	cars	light trucks	heavy trucks	MPH
4/2	8:45 PM	20m	60.6	63	60	54	69.8	2	EB	334	3	2	30-40
									WB	98	9	3	30-45
4/2	6:45 PM	20m	59.2	62.5	57.5	48.5	70.1	5	EB	147	2	1	30-40
									WB	214	7	2	30-40

Directions: ||/▶ (start/pause button), record for 20 minutes for mobile, (10 minutes for stationary); at 20 minute mark, hit pause ||/▶, then scroll the parameters and write them down in the above chart; then hit data and scroll through parameter to store - OK - write down record # above; then reset ◀ ; and you're ready to start a new site.

Site Map

- consistent bird tweets, accents for +3 dBA
- EB traffic slower than WB
 - EB stopped every few minutes. Monitor paused during these times.
 - WB consistent free flow
- HT we usually loud buses
- Monitor at lower elevation, 5-10 ft
- Site has nearby balconies and table/chair



Location: Villa Intermediaria please note any line-of-sight obstructions					Vehicle Speed: <i>varies</i>			Surface Type:		Temperature: <i>EB 50</i>		Wind:	
Date	Time Start	Duration	Leq	L10	L50	L90	Lmax	Record #	NB/SB EB/WB	cars	light trucks	heavy trucks	
4/2	7:40 AM	20m	56.8	59.5	55.5	51	69.7	1	EB	417	6	2	25.5
									WB	123	4	1	55-45
4/2	6 PM	20m	55.5	58.5	54	47	71.6	4	EB	193	3	3	1
									WB	252	9	2	1

Directions: II/▶ (start/pause button), record for 20 minutes for mobile, (10 minutes for stationary); at 20 minute mark, hit pause II/▶, then scroll the parameters and write them down in the above chart; then hit data and scroll through parameter to store - OK - write down record # above; then reset ◀◀ ; and you're ready to start a new site.

Site Map

- 95
- ~~70~~ free flow, 5% not counted
- buses counted as HT
- site next to hotel pool, negligible bird noise
- planes overhead, passed monitor
- PM a tad closer to road, maybe 5-10ft



Location: Emory Inn, pool please note any line-of-sight obstructions					Vehicle Speed:		Surface Type:		Temperature: 45	Wind: bursts		
Date	Time Start	Duration	Leq	L10	L50	L90	Lmax	Record #	NB/SB EB/WB	cars	light trucks	heavy trucks
4/3	9:20 AM	20m	56.7	58.5	55	52	80.7	6	FB	263	9	1
									WB	157	12	2
4/3	5:40 PM	20m	57.4	59	56	52.5	73.6	9	FB	273	1	2
									WB	331	8	2

Directions: II/ (start/pause button), record for 20 minutes for mobile, (10 minutes for stationary); at 20 minute mark, hit pause II/ , then scroll the parameters and write them down in the above chart; then hit data and scroll through parameter to store - OK - write down record # above; then reset 02 ; and you're ready to start a new site.

Appendix E

Memorandum of Agreement

MEMORANDUM OF AGREEMENT
BETWEEN THE CENTERS FOR DISEASE CONTROL AND PREVENTION
AND THE
GEORGIA STATE HISTORIC PRESERVATION OFFICER
REGARDING
HISTORIC DISTRICT, EDWARD G. ROYBAL CAMPUS, ATLANTA, GEORGIA

WHEREAS, THE CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC) proposes an “Undertaking” to modernize and replace through new construction their office, laboratory, and research facilities at the Edward R. Roybal Campus, located at 1600 Clifton Road to meet the CDC’s security and safety criteria developed after the Oklahoma City Bombing in 1995 and the terrorist attacks of September 11, 2001 as described in the Roybal Campus Master Plan;

WHEREAS, the CDC is a federal agency that follows the requirements set forth in the National Historic Preservation Act (NHPA); and

WHEREAS, the Undertaking will consist of the staged demolition of five historic properties (Buildings 1 Main, 1 East, 1 South, 3, 6) joined as one building and situated at 1600 Clifton Road; and

WHEREAS, the Undertaking's area of potential effect (APE) has been defined as the tract containing these buildings and their immediate surrounds (Attachment A) and their National Register qualifying characteristics; and

WHEREAS, the CDC has determined that the Undertaking will have an adverse effect on properties that were identified by a Cultural Resources Assessment conducted in 2008 that recommended them as eligible for listing in the National Register of Historic Places as a historic district (Buildings 1 Main, 1 East, 1 South, 3, 6, and 10); and

WHEREAS, the Georgia Historic Preservation Division (GA SHPO) has concurred with that eligibility recommendation; and

WHEREAS, the CDC has consulted with the GA SHPO pursuant to 36 C.F.R. part 800, of the regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) to resolve the adverse effects of the Undertaking on the historic properties; and

WHEREAS, in accordance with 36 C.F.R. § 800.6(a)(1), the CDC has notified the

Advisory Council on Historic Preservation (ACHP) of its adverse effect determination with specified documentation and the ACHP has chosen not to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii); and

NOW, THEREFORE, the CDC and the GA SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the Undertaking on historic properties.

STIPULATIONS

The CDC shall ensure that the following actions take place to mitigate adverse effects to the historic district through documentation and the development of two public outreach products.

I. DOCUMENTATION

Documentation Photography, as-built plans, and a historical narrative will be professionally prepared by a historian that meets the Secretary of Interior's professional standards (36 CFR Part 61) and compiled into a documentation portfolio.

a) A draft copy of the documentation shall be submitted to the SHPO for review and comment before the submission of the final documentation. Five copies will be prepared for distribution to the Georgia Historic Preservation Division, Georgia Archives and History, Atlanta History Center, the DeKalb Historical Society, the CDC Library respectively. Two copies will contain original images; one copy will be submitted to GA SHPO and one copy will be retained by the CDC.

b) Original as-built drawings for Buildings 1 Main, 1 East, 1 South, 3, 6, and 10 and historic maps showing the establishment of the campus will become part of the CDC's Library's permanent collection. In addition, as-built drawings for other buildings that were part of the original CDC campus but were demolished in the past will be retained in the archived collection.

c) Digital photographs will be printed to National Register of Historic Places standards and will be appropriately labeled for submission. A cd with the images will also be submitted.

d) Historical narrative will be fully referenced and will be printed on archival paper. A pdf document will also be submitted.

II. PUBLIC INTERPRETATION

a) Public interpretation through signage or historic markers will be integrated into the sidewalk and security/barrier wall on Clifton Road to highlight the history of the CDC and the significance of its early buildings. CDC will develop an interpretive plan and

consult with SHPO prior to implementation.

b) A webpage/site will be developed that highlights the history of the CDC. This public outreach vehicle will feature oral history, historic photography and a narrative about the CDC and its historical mission(s).

III. LATE DISCOVERY

As the project area was not surveyed, there is the potential for previously unknown cultural materials to be revealed by ground disturbance. In the event of such a discovery, construction in that area shall cease, the SHPO shall be notified, and an appropriate treatment of these materials shall be determined.

IV. DURATION

This MOA shall be null and void if its terms are not carried out within five (5) years from the date of its execution. Prior to such time, the CDC may consult with the other signatory to reconsider the terms of the MOA and amend it in accordance with Stipulation VII below.

V. MONITORING AND REPORTING

Six months following the execution of this MOA until it expires or is terminated, the CDC shall provide the GA SHPO a summary report detailing work undertaken pursuant to its terms. The report shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in the CDC's efforts to carry out the terms of this MOA.

VI. DISPUTE RESOLUTION

Should the GA SHPO object to the manner in which the terms of this MOA are implemented, the CDC shall consult with the GA SHPO to resolve the objection. If the CDC determines that such objection cannot be resolved, the CDC shall:

A. Forward all documentation relevant to the dispute, including the CDC's proposed resolution, to the ACHP. The ACHP shall provide the CDC with its written advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, the CDC shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, and the GA SHPO, and will provide each with a copy of this written response. The CDC shall then proceed according to its final decision.

B. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, the CDC may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, the CDC shall prepare a written response that takes into account any timely comments regarding the dispute from the GA

SHPO to the MOA, and provide them and the ACHP with a copy of such written response.

C. Carry out all other actions subject to the terms of this MOA that are not the subject of the dispute without change.

VII. AMENDMENTS

This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment shall be effective on the date a copy, signed by all of the signatories, is filed with the ACHP.

VIII. GOVERNING LAW

This agreement shall be governed by applicable federal law.

IX. FUNDING

In general, each signatory to this MOA is expected to bear the costs of its participation in this Undertaking. Nothing in this MOA shall obligate the Department of Health and Human Services, CDC or GA SHPO to any current or future expenditure of resources in advance of the availability of appropriations from Congress or the Georgia state legislature.

X. LIABILITY

Each signatory to this MOA will be responsible for its own acts and the results thereof and shall not be responsible for the acts of the other party and the results thereof. Each signatory therefore agrees that it will assume all risk and liability to itself, its agents or employees, for any injury to persons or property resulting in any manner from the conduct of its own operations and the operations of its agents or employees under this MOA, and for any loss, cost, damage, or expense resulting at any time from any and all causes due to any act or acts, negligence, or the failure to exercise proper precautions, of or by itself or its agents or its own employees, while conducting activities under and pursuant to this agreement. CDC's liability shall be governed by the provisions of the Federal Tort Claims Act [28 U.S.C. 2671-80 (1976)].

XI. ENTIRETY

This MOA represents the entire agreement of the signatories with respect to the subject matter hereof, and supersedes all prior and/or contemporaneous agreements or understandings, written or oral, with respect to the subject matter of this MOU.

XII. TERMINATION

If any signatory to this MOA determines that its terms shall not or cannot be carried out, that

party shall immediately consult with the other parties to attempt to develop an amendment above. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.

Once the MOA is terminated, and prior to work continuing on the Undertaking, the CDC must either (a) execute an MOA pursuant to 36 CFR § 800.6 or (b) request, take into account, and respond to, comments of the ACHP under 36 CFR § 800.7. The CDC shall notify the signatories as to the course of action it will pursue.

Execution of this MOA by the CDC and the GA SHPO and implementation of its terms evidence that the CDC has taken into account the effects of this Undertaking on historic properties and afforded the ACHP an opportunity to comment.

This MOA is considered terminated upon the completion and acceptance of all terms and stipulations set forth herein.

SIGNATORIES:

Centers for Disease Control and Prevention

97. Chandler 26 Sep 08 Date
George F. Chandler, Director
Buildings and Facilities Office

Georgia State Historic Preservation Officer

W. Raymond Luce 10/6/08 Date
Dr. Raymond Luce, State Historic Preservation Officer

Appendix F

Agency Coordination Letters



MARK WILLIAMS
COMMISSIONER

DAN FORSTER
DIRECTOR

April 10, 2013

Roger Bledsoe
Environmental Scientist
Jacobs Engineering Group, Inc.
6801 Governors Lake Parkway
Bldg. 200
Norcross, GA 30071

Subject: Known occurrences of natural communities, plants and animals of highest priority conservation status on or near HHS/CDC Edward R. Roybal Campus Master Plan EIS, DeKalb County, Georgia

Dear Mr. Bledsoe:

This is in response to your request of February 27, 2013. According to our records, within a three-mile radius of the project site, there are the following Natural Heritage Database occurrences:

GA *Cambarus howardi* (Chattahoochee Crayfish) [HISTORIC] on site in Peachtree Creek and Tributaries

***Panax quinquefolius* (American Ginseng) on site [-84.326415, 33.802253]**

Pd mesic broadleaf decid. forest (Piedmont Mesic Hardwood Forest) approx. 1.5 mi. S of site

GA *Schisandra glabra* (Bay Star-vine) on site [-84.326415, 33.802253]

GA *Schisandra glabra* (Bay Star-vine) on site [-84.324473, 33.795072]

GA *Schisandra glabra* (Bay Star-vine) approx. 1.5 mi. S of site

GA *Schisandra glabra* (Bay Star-vine) approx. 1.5 mi. W of site

GA *Schisandra glabra* (Bay Star-vine) approx. 2.5 mi. W of site

Greenspace [Fulton County] approx. 1.5 mi. W of site

Greenspace [DeKalb County] approx. 3.0 mi. SE of site

Johns Sanctuary [Atlanta Audubon Society] approx. 1.5 mi. N of site

* Entries above preceded by "US" indicates species with federal status (Protected, Candidate or Partial Status). Species that are federally protected in Georgia are also state protected; "GA" indicates Georgia protected species.

Recommendations:

We have records of three high priority species within the potential project area. (see bold above). The Chattahoochee Crayfish record is historic and is not likely to be found on site. However, the records of Ginseng and Bay Star-vine are current and surveys should be completed to identify these and any other high priority species before planning is completed. In addition to these species, we are concerned about stream habitats that could be impacted by construction activities. In order to protect aquatic habitats and water quality, we recommend that all machinery be kept out of streams during construction. We urge you to use stringent erosion control practices during construction activities. Further, we strongly advocate leaving vegetation intact within 100 feet of streams wherever possible, which will reduce inputs of sediments, assist with maintaining riverbank integrity, and provide shade and habitat for aquatic species. We realize that some trees may have to be removed, but recommend that shrubs and ground vegetation be left in place.

Disclaimer:

Please keep in mind the limitations of our database. The data collected by the Nongame Conservation Section comes from a variety of sources, including museum and herbarium records, literature, and reports from individuals and organizations, as well as field surveys by our staff biologists. In most cases the information is not the result of a recent on-site survey by our staff. Many areas of Georgia have never been surveyed thoroughly. Therefore, the Nongame Conservation Section can only occasionally provide definitive information on the presence or absence of rare species on a given site. Our files are updated constantly as new information is received. **Thus, information provided by our program represents the existing data in our files at the time of the request and should not be considered a final statement on the species or area under consideration.**

If you know of populations of highest priority species that are not in our database, please fill out the appropriate data collection form and send it to our office. Forms can be obtained through our web site (<http://www.georgiawildlife.com/node/1376>) or by contacting our office. If I can be of further assistance, please let me know.

Sincerely,



Katrina Morris
Environmental Review Coordinator

Data Available on the Nongame Conservation Section Website

- Georgia protected plant and animal profiles are available on our website. These accounts cover basics like descriptions and life history, as well as threats, management recommendations and conservation status. Visit <http://www.georgiawildlife.com/node/2721>.
- Rare species and natural community information can be viewed by Quarter Quad, County and HUC8 Watershed. To access this information, please visit our GA Rare Species and Natural Community Information page at: <http://www.georgiawildlife.com/conservation/species-of-concern?cat=conservation>.
- Downloadable files of rare species and natural community data by quarter quad and county are also available. They can be downloaded from: <http://www.georgiawildlife.com/node/1370>.

Appendix G

Procedures for Handling & Disposing of Infectious Wastes at the Roybal Campus

Biological Waste Management and Public Safety

1. CDC Personnel and Public Safety

The CDC Roybal Campus includes laboratory research activities which involve working with infectious microorganisms and laboratory animals. Depending upon the activity and the type of infectious agent being studied, certain safety procedures, equipment, and facilities have been provided to ensure the safety of CDC personnel and the surrounding environment.

The following discussions describe the laboratories at the Roybal Campus and the level of precaution or safety used for each. In general, CDC's laboratory safety program is founded on:

- trained laboratory supervisors;
- adherence to strict laboratory protocols specified in both standardized and customized (lab-specific) programs and procedures manuals;
- complete employee training programs; and,
- strict limitations on individuals provided access to specific laboratories.

Basic biosafety principles, terminology, concepts, and a description of existing laboratory conditions are provided as a basis for evaluating potential impacts in Chapter 3.11. Because proper handling and disposal of infectious waste is a key factor for the ensuring safety of both CDC personnel and the general public, a description of procedures used for handling and disposing of infectious wastes at the CDC is also provided.

2. Biosafety Principles and Terminology

To ensure the safety of CDC personnel and the surrounding community, CDC conducts all laboratory research and related activities in strict accordance with biosafety guidelines for microbiological and biomedical laboratory operations, as provided in "Biosafety in Microbiological and Biomedical Laboratories 5th Edition" (HHS publication No. (CDC) 21-1112, December 2009). This "guidance" document was prepared by the Centers for Disease Control and Prevention and the National Institutes of Health. Key features of the standards are summarized below.

The primary principles of biosafety are containment and risk assessment:

"The fundamentals of containment include the microbiological practices, safety equipment, and facility safeguards that protect laboratory workers, the environment, and the public from infectious microorganisms that are handled and stored in the laboratory. Risk assessment is the process that enables the appropriate selection of microbiological practices, safety equipment and facility safeguards that can prevent laboratory associated infections (LAI)."¹

¹ HHS/CDC. *Biosafety in Microbiological and Biomedical Laboratories 5th Edition*. HHS publication No. (CDC) 21-1112, December 2009.

One fundamental objective of biosafety is containment both primary and secondary. As referred to in the guidelines, containment is used to describe safe methods for managing infectious agents in the laboratory environment where they are being handled or used. Primary containment relates to the protection of laboratory personnel from exposure to infectious agents, whereas secondary containment relates to the protection of the external environment (i.e., surrounding community, non-lab personnel, etc.). Primary containment is achieved through the use of standard microbiological practices and techniques, and the use of appropriate safety equipment (primary barriers). Secondary containment is achieved through a combination of facility design (secondary barriers) and operational practices.

Primary barriers are designed to protect laboratory personnel working with infectious agents, and therefore indirectly protect the surrounding environment. Primary barriers can include such items as Biosafety Cabinets (BSCs), personal protective equipment (gloves, goggles, respirators, face shields etc.), and other laboratory equipment such as safety centrifuge cups. Usually a combination of BSCs and personal protective gear is used to obtain a desired level of protection.

Secondary barriers are part of the facility design and are primarily intended to protect the surrounding environment. Secondary barriers may include controlled access and ventilation systems to ensure directional air flow (i.e. into the laboratory and not out), air treatment systems for exhaust air, and anterooms at the laboratory entrances.

Guidelines for activities involving infectious agents, and/or activities which experimentally or naturally infected vertebrate test animals are provided in the standards. These guidelines are based on four levels of containment referred to as Biosafety Levels (BSLs) for infectious agent activities, and Animal Biosafety Levels (ABSLs) for activities involving infected vertebrate animals. The four biosafety levels are characterized in Table 1 (this table also includes a definition of “infectious wastes”).

Required safety measures for each BSL and ABSL increase with each level, with level four being the highest. A summary of key requirements for both BSLs and ABSLs are provided in Tables 2 and 3, respectively.

Table 1. Key Term and Definitions	
Biosafety Level 1	<p>Biosafety Level 1 practices, safety equipment, and facilities are appropriate for undergraduate and secondary education training and teaching laboratories, and for other facilities in which work is done with defined and characterized strains of viable microorganisms not known to cause disease in healthy adult humans. <i>Bacillus subtilis</i>, <i>Nigeria gruberi</i>, infectious canine hepatitis virus and exempt organisms under the NIH Guidelines are representative of those microorganisms meeting these criteria. Many agents not ordinarily associated with disease processes in humans are, however, opportunistic pathogens and may cause infections in young, aged, and immunodeficient or immunosuppressed individuals. Vaccine strains which have undergone multiple <i>in vivo</i> passages should not be considered avirulent simply because they are vaccine strains.</p> <p>Biosafety level 1 represents a basic level of containment that relies on standard microbiological practices with no special primary or secondary barriers recommended, other than a sink for hand washing.</p>
Biosafety Level 2	<p>Biosafety level 2 practices, equipment, and facility design and construction are applicable to clinical, diagnostic, teaching and other facilities in which work is done with the broad spectrum of indigenous moderate-risk agents present in the community and associated with human diseases of varying severity. With good microbiological techniques, these agents can be used safely in activities conducted on the open bench, provided the potential for producing splashes or aerosols is low. Hepatitis B virus, the <i>Salmonellae</i>, and <i>Toxoplasma</i> are representative of the microorganism assigned to this containment level.</p> <p>Biosafety level 2 is appropriate when work is done with any human-derived blood, body fluids, tissues, or primary human cell lines where the presence of an infectious agent may be unknown. (Laboratory personnel working with human-derived materials should refer to the OSHA <i>Bloodborne Pathogen Standard</i> for specific required precautions).</p> <p>Primary hazards to personnel working with these agents relate to accidental percutaneous or mucous membrane exposures, or ingestion of infectious materials. Extreme caution should be taken with contaminated needles or sharp instruments. Even though organisms routinely manipulated at BSL2 are not known to be transmissible by the aerosol route, procedures with aerosol or high splash potential that may increase the risk of such personnel exposure must be conducted in primary containment equipment, or devices such as BSC or safety centrifuge cups. Personal protective equipment should be used as appropriate, such as splash shields, face protection, gowns, and gloves.</p> <p>Secondary barriers such as hand washing and waste decontamination facilities must be available to reduce potential environmental contamination.</p>

Table. 1 Key terms and definitions (continued)	
Biosafety Level 3	<p>Biosafety Level 3 practices, safety equipment, and facility design and construction are applicable to clinical, diagnostic, teaching, research, or production facilities in which work is done with indigenous or exotic agents with a potential for respiratory transmission, and which may cause serious and potentially lethal infection. <i>Mycobacterium tuberculosis</i>, St. Louis encephalitis, and <i>Coxiella burnetii</i> are representative of microorganisms assigned to this level. Primary hazards to personnel working with these agents relate to autoinoculation, ingestion, and exposure to potentially infectious aerosols.</p> <p>At Biosafety Level 3, more emphasis is placed on primary and secondary barriers to protect personnel in contiguous areas, the community, and the environment from exposure to potentially infectious aerosols. For example, all laboratory manipulations should be performed in a BSC or other enclosed equipment, such as a gastight aerosol generation chamber. Secondary barriers for this level include controlled access to the laboratory and ventilation requirements that minimizes the release of infectious aerosols from the laboratory.</p>
Biosafety Level 4	<p>Biosafety Level 4 practices, safety equipment, and facility design and construction are applicable for work with dangerous and exotic agents which pose a high individual risk of life-threatening disease, which may be transmitted via the aerosol route, and for which there is no available vaccine or therapy. Agents with a close or identical antigenic relationship to Biosafety Level 4 agents should also be handled at this level. When sufficient data are obtained, work with these agents may continue at this level or at a lower level. Viruses such as Marburg or Congo-Crimean hemorrhagic fever are manipulated at Biosafety Level 4.</p> <p>The primary hazards to personnel working with Biosafety Level 4 agents are respiratory exposure to infectious aerosols, mucous membrane or broken skin exposure to infectious droplets, and auto-inoculation. All manipulations of potentially infectious diagnostic materials, isolates, and naturally or experimentally infected animals pose a high risk of exposure and infection to laboratory personnel, the community, and the environment.</p> <p>The laboratory worker's complete isolation against aerosolized infectious materials is accomplished primarily by working in a Class III BSC or a full-body, air-supplied positive-pressure personnel suit. The Biosafety Level 4 facility itself is generally a separate building or completely isolated zone with complex specialized ventilation and waste management systems to prevent the release of viable agents to the environment</p>
Infectious Waste	<p>Infectious wastes are those wastes containing, or potentially containing pathogens of sufficient virulence and quantity so that the exposure to the waste by a susceptible host could result in the development by that host of a communicable disease.</p>

Source: HHS/CDC. *Biosafety in Microbiological and Biomedical Laboratories 5th Edition*.

Table 2. Summary of recommended biosafety levels for infectious agents (BSLs).				
Biosafety Level	Agents	Practices	Safety Equipment (Primary Barriers)	Facilities (Secondary Barriers)
BSL-1	Not known to consistently cause disease in healthy adults	Standard microbiological practices	<ul style="list-style-type: none"> No primary barriers required PPE: laboratory coats and gloves; eye; face protection as needed 	Laboratory bench and sink required
BSL-2	Associated with human disease; Routes of transmission include percutaneous injury, ingestion, mucous membrane exposure	BSL-1 practices plus: <ul style="list-style-type: none"> Limited access Biohazard warning signs "Sharps" precautions Biosafety manual defining any needed waste decontamination or medical surveillance policies 	BSCs or other physical containment devices used for all manipulations of agents that cause splashes or aerosols of infectious materials; PPEs; laboratory coats; gloves; face and eye protection as needed	BSL-1 plus: Autoclave available
BSL-3	Indigenous or exotic agents that may cause serious or potentially lethal disease through the inhalation route of exposure	BSL-2 practice plus: <ul style="list-style-type: none"> Controlled access Decontamination of all waste Decontamination of lab clothing before laundering 	BCSs or other physical containment devices used for all open manipulations of agents; PPEs: protective lab clothing; gloves; face, eye, and respiratory protection as needed	BSL-2 plus: <ul style="list-style-type: none"> Physical separation from access corridors Self-closing, double door access Exhausted air not recirculated Negative airflow into laboratory Entry through airlock or anteroom Hand washing sink near laboratory exit
BSL-4	Dangerous/exotic agents posing a high individual risk, aerosol-transmitted laboratory infections that are frequently fatal, for which there are no vaccines or	BSL-3 practices plus: <ul style="list-style-type: none"> Clothing change before entering Shower on exit All material decontaminated on exit from facility 	Primary barriers = All procedures conducted in Class III BSCs or Class I or Class II BSCs <u>in combination with</u> full-body, air supplied, positive pressure personnel suit	BSL-3 plus: <ul style="list-style-type: none"> Separate building or isolated zone Dedicated supply/exhaust vacuum, and decontamination systems Other requirements outlined in text

	treatments; agents with close or identical antigenic relationship to an agent requiring ABSL4 until data are available to redesignate this level; or related agents with unknown risk transmission			
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Source: HHS/CDC. *Biosafety in Microbiological and Biomedical Laboratories 5th Edition*.

Table 3. Summary of recommended biosafety levels for activities which infected vertebrate animals are used (ABSLs).				
Biosafety Level	Agents	Practices	Safety Equipment (Primary Barriers)	Facilities (Secondary Barriers)
ABSL-1	Not known to consistently cause disease in healthy adults	Standard animal care and management practices, including appropriate medical surveillance programs	<ul style="list-style-type: none"> As required for normal care of each species PPEs: laboratory coats, gloves, face, and eye protection as needed 	Standard animal facility <ul style="list-style-type: none"> Non recirculation of exhaust air Directional air flow recommended Hand washing sink available
ABSL-2	Associated with human disease. Hazard: percutaneous exposure, ingestion, mucous membrane exposure	ABSL-1 practices plus: <ul style="list-style-type: none"> Limited access Biohazard warning signs "Sharps" precautions Biosafety manual Decontamination of all infectious wastes and animal cages prior to washing 	ABSL-1 equipment plus primary barriers: <ul style="list-style-type: none"> Containment equipment appropriate for all animal species; PPEs: laboratory coats, gloves, face and respiratory protection as needed 	ABSL-1 plus: <ul style="list-style-type: none"> Autoclave available Hand washing sink available Mechanical cage washer recommended Negative airflow into animal and procedure rooms recommended
ABSL-3	Indigenous or exotic agents that may cause serious or potentially lethal disease through the inhalation route of exposure	ABSL-2 practice plus: <ul style="list-style-type: none"> Controlled access Decontamination of clothing before laundering Cages decontaminated before bedding removed 	ABSL-2, equipment plus: <ul style="list-style-type: none"> Containment equipment for housing animals and cage dumping activities Class I, II, or III 	ABSL-2 facility plus: <ul style="list-style-type: none"> Physical separation from access corridors Self-closing, double door access Sealed penetrations & windows Autoclave available

Table 3. Summary of recommended biosafety levels for activities which infected vertebrate animals are used (ABSLs).				
Biosafety Level	Agents	Practices	Safety Equipment (Primary Barriers)	Facilities (Secondary Barriers)
		<ul style="list-style-type: none"> Disinfectant foot bath as needed 	BSCs available for manipulative procedures (inoculation necropsy) that may create infectious aerosols. <ul style="list-style-type: none"> PPEs: appropriate respiratory protection 	in facility <ul style="list-style-type: none"> Entry through ante-room or airlock Negative airflow into animal and procedure rooms Hand washing sink near exit of animal or procedure room
ABSL-4	Dangerous/exotic agents which pose a high risk, aerosol-transmitted laboratory infections that are frequently fatal, for which there are no vaccines or treatments; agents with close or identical antigenic relationship to an agent requiring ABSL4 until data are available to redesignate this level ; or related agents with unknown risk transmission	ABSL-3 practices plus: <ul style="list-style-type: none"> Entrance through change room where personal clothing is removed and laboratory clothing is put on: shower on exiting Decontaminate all wastes before removal from facility 	ABSL-3 equipment plus: <ul style="list-style-type: none"> Maximum containment equipment (i.e., Class III BSC or partial containment equipment in combination with full body, air-supplied positive-pressure personnel suit) used for all procedures and activities 	ABSL-3 plus: <ul style="list-style-type: none"> Separate building/isolated zone Dedicated supply exhaust vacuum, and decon systems Other requirements outlined in text

The guidelines for determining the appropriate BSL for a given laboratory or operation are dependent upon several variables including the virulence, pathogenicity, biological stability, and communicability of the agent involved. The guidelines provide appropriate BSL/ABSL levels and laboratory precautions for specific microorganisms and for various types of agents (i.e. parasitic, fungal, bacterial, rickettsial, viral, or arboviral).

Each laboratory director is responsible for assigning the appropriate BSL and any additional safety precautions. If recommendations for a specific agent are not provided in the guidelines, the assigned BSL/ABSL level and precautions are based on risk assessment.

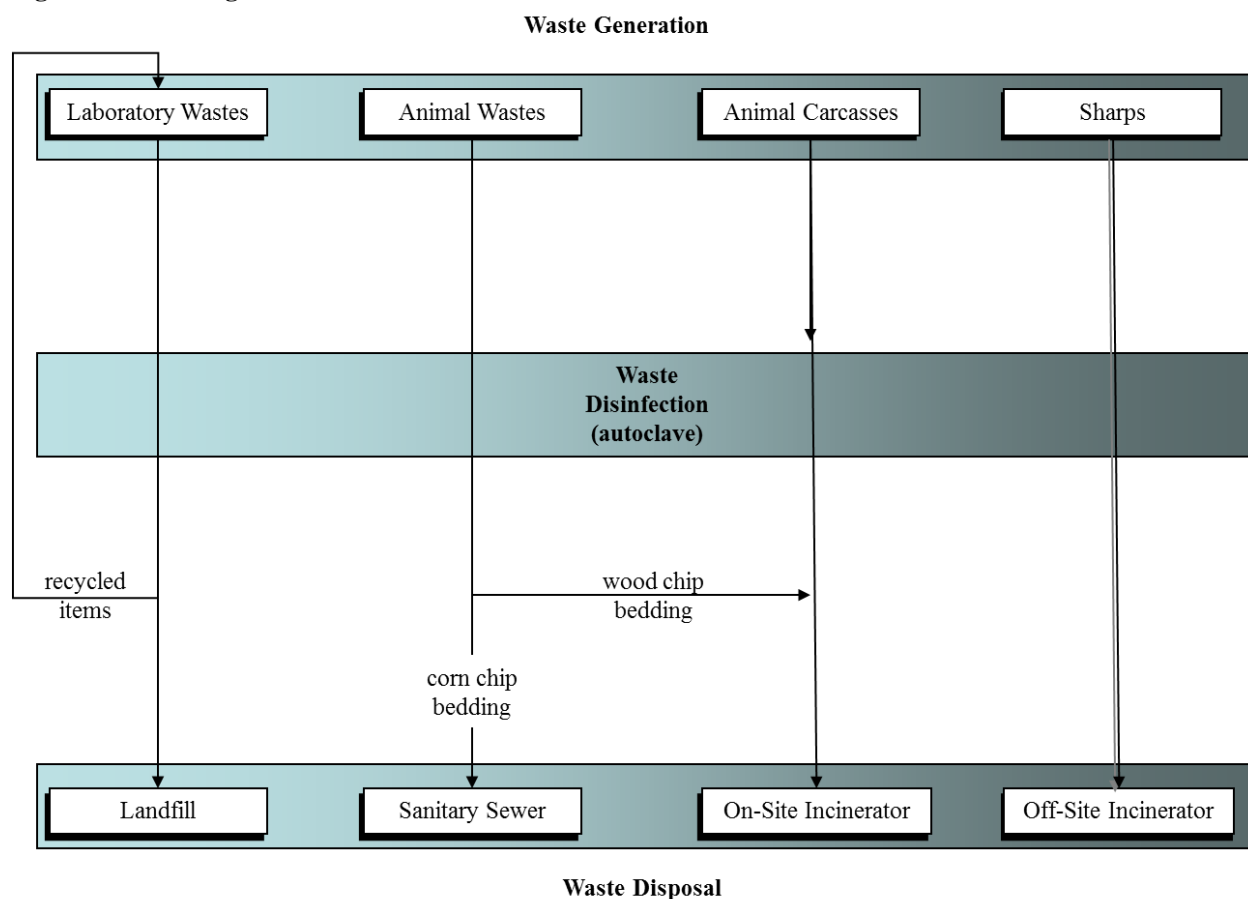
3. Decontamination and Disposal of Infectious Wastes

Proper handling and disposal of infectious wastes is an integral part of effective containment. Biomedical wastes (BMWs), which include potentially infectious waste, are regulated at the state level. Georgia requirements are listed under the Rules of Georgia Department of Natural Resources, Environmental Protection Division, Solid Waste Management (391-3-4), Biomedical Wastes (392-3-4-15). The CDC Roybal Campus is in full compliance with the 392-3-4-15 requirements.

Infectious wastes generated at CDC are decontaminated by autoclaving prior to disposal. Autoclaving is a process involving exposure to pressurized steam for a period of time in order to destroy microorganisms. Autoclaving is considered one of the most dependable methods for the destruction of all forms of microbial life and is included in the Georgia regulations as one of the acceptable methods for rendering biomedical wastes noninfectious.

The disposal method for decontaminated wastes is dependent upon the waste category and certain physical characteristics. A flow chart depicting the disposal of infectious wastes at CDC is provided in Figure 1: Flow Diagram for Infectious Waste.

Figure 1: Flow Diagram for Infectious Waste



Handling and disposal methods for infectious wastes generated at the Clifton Road Campus are determined by waste category. The four possible waste categories include:

- laboratory wastes (plastics, glass, liquids, paper, latex gloves, and metals);
- sharps (wastes which may inflict punctures or lacerations);
- animal wastes; and,
- animal carcasses.

Laboratory wastes are placed in discard pans that are located in each laboratory. The laboratory staff collects the pans and safely transports them to the autoclave collection rooms located on each floor. Each pan is disinfected in the autoclave and the wastes are subsequently segregated and either recycled or disposed of in a landfill. Wastes to be landfilled are retained in a large bin prior to shipment. Autoclaved pans are cleaned with a disinfectant and inspected prior to being returned to the laboratories.

Because sharps represents a danger to personnel handling the wastes, these wastes are required to be placed in a labeled, leak-resistant, puncture resistant container. Each laboratory station is provided with a sharps container. When the containers are filled they are collected and autoclaved. The sterilized wastes are then segregated and the sharps are picked up by a contractor and transported off-site for incineration. Sharps are not landfilled because they represent a greater risk than other BMWs.

Animal wastes, including bedding material, feces, urine, and food remaining in the animal cage (Davis, 1994), are taken to the autoclave room at the Clifton Road Campus where they are rendered non-infectious by autoclaving. The bedding material is then either incinerated or disposed of in the sanitary sewer. Bedding material that is soft (i.e., corn-cob) is ground up and discharged to the sanitary sewer, while material containing wood chips is incinerated in one of the campus incinerators. Cages that have been autoclaved are supplied with fresh bedding and returned to the laboratories via a "clean" elevator.

Animal carcasses are double-bagged in biowaste bags and autoclaved. After being autoclaved the carcasses are then incinerated.

4. Air Filters

As described above, ventilation systems which ensure directional air flow are used in higher risk labs as secondary barriers. Under normal working conditions, there is a minimal risk of airborne pathogens in laboratory space. However, as a precaution, the CDC uses high-efficiency particulate air (HEPA) filter systems in selected BSL 3 and all BSL4 labs. HEPA filters remove particles 0.3 μ in size with 99.97% efficiency or higher. Particles larger or smaller than 0.3 μ m are filtered with greater efficiency.

The filters are replaced on regular service intervals. Before removal from the HEPA system, the filters are gassed in-place with vapor phase hydrogen peroxide, and then plastic bagged for transport to incineration or landfill. Periodically the HEPA filters are challenged with an aerosol on an annual basis to ensure that there are no leaks.

Appendix H

Greenhouse Gases and Sustainability

Existing Conditions, 2012, VMT Estimate by Vehicle Type

Process Type	Vehicle Type	Fuel Type	Commute Distance Traveled (Miles / Day)	Number of Commute Days per Year	Total Mileage by Vehicle Type	Unit of Measure
Commuter Travel - Personal Owned Vehicles	POV Passenger Car	Gasoline	78,272	230	18,002,494	Miles
	POV SUV or Truck	Gasoline	12,121	230	2,787,922	Miles
	POV SUV or Truck	Diesel	0	230	0	Miles
	Motorcycle	Gasoline	146	230	33,475	Miles
	Hybrid	Gasoline	2,259	230	519,590	Miles
Commuter Travel - Car / Van Pools	Car Pool	Gasoline	9,159	230	2,106,682	Miles
	Van Pool	Gasoline	10,675	230	2,455,353	Miles
Commuter Travel - Mass Transit	Bus	Diesel	1,185	230	272,491	Miles
	Metro / Transit Rail	Electric	0	230	0	Miles
	Commuter Rail	Diesel	0	230	0	Miles
	Intercity Rail	Diesel	0	230	0	Miles
	Ferry	Diesel	0	230	0	Miles
Commuter Travel - Human Powered	Walking and/or Bicycling		573	230	131,851	Miles

No Build, 2025, , VMT Estimate by Vehicle Type

Process Type	Vehicle Type	Fuel Type	Commute Distance Traveled (Miles / Day)	Number of Commute Days per Year	Total Mileage by Vehicle Type	Unit of Measure
Commuter Travel - Personal Owned Vehicles	POV Passenger Car	Gasoline	91,046	230	20,940,483	Miles
	POV SUV or Truck	Gasoline	14,097	230	3,242,247	Miles
	POV SUV or Truck	Diesel	0	230	0	Miles
	Motorcycle	Gasoline	169	230	38,931	Miles
	Hybrid	Gasoline	2,627	230	604,263	Miles
Commuter Travel - Car / Van Pools	Car Pool	Gasoline	10,652	230	2,449,990	Miles
	Van Pool	Gasoline	12,415	230	2,855,482	Miles
Commuter Travel - Mass Transit	Bus	Diesel	1,378	230	316,897	Miles
	Metro / Transit Rail	Electric	0	230	0	Miles
	Commuter Rail	Diesel	0	230	0	Miles
	Intercity Rail	Diesel	0	230	0	Miles
	Ferry	Diesel	0	230	0	Miles
Commuter Travel - Human Powered	Walking and/or Bicycling		667	230	153,337	Miles

Build, 2025, VMT Estimate by Vehicle Type

Process Type	Vehicle Type	Fuel Type	Commute Distance Traveled (Miles / Day)	Number of Commute Days per Year	Total Mileage by Vehicle Type	Unit of Measure
Commuter Travel - Personal Owned Vehicles	POV Passenger Car	Gasoline	109,724	230	25,236,462	Miles
	POV SUV or Truck	Gasoline	17,006	230	3,911,473	Miles
	POV SUV or Truck	Diesel	0	230	0	Miles
	Motorcycle	Gasoline	180	230	41,422	Miles
	Hybrid	Gasoline	3,169	230	728,941	Miles
Commuter Travel - Car / Van Pools	Car Pool	Gasoline	10,652	230	2,449,990	Miles
	Van Pool	Gasoline	12,415	230	2,855,482	Miles
Commuter Travel - Mass Transit	Bus	Diesel	1,378	230	316,897	Miles
	Metro / Transit Rail	Electric	0	230	0	Miles
	Commuter Rail	Diesel	0	230	0	Miles
	Intercity Rail	Diesel	0	230	0	Miles
	Ferry	Diesel	0	230	0	Miles
Commuter Travel - Human Powered	Walking and/or Bicycling		667	230	153,337	Miles

Existing Conditions, 2012, Emission Factor by Vehicle Type

Process Type	Vehicle Type	Emission Factor CO2	Unit of Measure	Emission Factor CH4	Unit of Measure	Emission Factor N2O	Unit of Measure
Commuter Travel - Personal Owned Vehicles	POV Passenger Car	0.364	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile
	POV SUV or Truck	0.519	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile
	POV SUV or Truck	0.561	kg CO2/Mile	0.000001	kg CH4/Mile	0.0000015	kg N2O/Mile
	Motorcycle	0.167	kg CO2/Mile	0.00007	kg CH4/Mile	0.000007	kg N2O/Mile
	Hybrid	0.0	kg CO2/Mile	0.0	kg CH4/Mile	0.0	kg N2O/Mile
Commuter Travel - Car / Van Pools	Car Pool	0.127	kg CO2/Mile	0.0000108	kg CH4/Mile	0.0000111	kg N2O/Mile
	Van Pool	0.058	kg CO2/Mile	0.000002	kg CH4/Mile	0.0000053	kg N2O/Mile
Commuter Travel - Mass Transit	Bus	0.745	kg CO2/Mile	0.0000006	kg CH4/Mile	0.0000005	kg N2O/Mile
	Metro / Transit Rail	0.163	kg CO2/Mile	0.000004	kg CH4/Mile	0.000002	kg N2O/Mile
	Commuter Rail	0.172	kg CO2/Mile	0.000002	kg CH4/Mile	0.000001	kg N2O/Mile
	Intercity Rail	0.185	kg CO2/Mile	0.000002	kg CH4/Mile	0.000001	kg N2O/Mile
	Ferry	0.0	kg CO2/Mile	0.0	kg CH4/Mile	0.0	kg N2O/Mile
Commuter Travel - Human Powered	Walking and/or Bicycling	0	kg CO2/Mile	0	kg CH4/Mile	0	kg N2O/Mile

No Build, 2025, Emission Factor by Vehicle Type

Process Type	Vehicle Type	Emission Factor CO2	Unit of Measure	Emission Factor CH4	Unit of Measure	Emission Factor N2O	Unit of Measure
Commuter Travel - Personal Owned Vehicles	POV Passenger Car	0.227	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile
	POV SUV or Truck	0.323	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile
	POV SUV or Truck	0.349	kg CO2/Mile	0.000001	kg CH4/Mile	0.0000015	kg N2O/Mile
	Motorcycle	0.167	kg CO2/Mile	0.00007	kg CH4/Mile	0.000007	kg N2O/Mile
	Hybrid	0.0	kg CO2/Mile	0.0	kg CH4/Mile	0.0	kg N2O/Mile
Commuter Travel - Car / Van Pools	Car Pool	0.079	kg CO2/Mile	0.0000108	kg CH4/Mile	0.0000111	kg N2O/Mile
	Van Pool	0.058	kg CO2/Mile	0.000002	kg CH4/Mile	0.0000053	kg N2O/Mile
Commuter Travel - Mass Transit	Bus	0.745	kg CO2/Mile	0.0000006	kg CH4/Mile	0.0000005	kg N2O/Mile
	Metro / Transit Rail	0.163	kg CO2/Mile	0.000004	kg CH4/Mile	0.000002	kg N2O/Mile
	Commuter Rail	0.172	kg CO2/Mile	0.000002	kg CH4/Mile	0.000001	kg N2O/Mile
	Intercity Rail	0.185	kg CO2/Mile	0.000002	kg CH4/Mile	0.000001	kg N2O/Mile
	Ferry	0.0	kg CO2/Mile	0.0	kg CH4/Mile	0.0	kg N2O/Mile
Commuter Travel - Human Powered	Walking and/or Bicycling	0	kg CO2/Mile	0	kg CH4/Mile	0	kg N2O/Mile

Build, 2025, Emission Factor by Vehicle Type

Process Type	Vehicle Type	Emission Factor CO2	Unit of Measure	Emission Factor CH4	Unit of Measure	Emission Factor N2O	Unit of Measure
Commuter Travel - Personal Owned Vehicles	POV Passenger Car	0.227	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile
	POV SUV or Truck	0.323	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile
	POV SUV or Truck	0.349	kg CO2/Mile	0.000001	kg CH4/Mile	0.0000015	kg N2O/Mile
	Motorcycle	0.167	kg CO2/Mile	0.00007	kg CH4/Mile	0.000007	kg N2O/Mile
	Hybrid	0.0	kg CO2/Mile	0.0	kg CH4/Mile	0.0	kg N2O/Mile
Commuter Travel - Car / Van Pools	Car Pool	0.079	kg CO2/Mile	0.0000108	kg CH4/Mile	0.0000111	kg N2O/Mile
	Van Pool	0.058	kg CO2/Mile	0.000002	kg CH4/Mile	0.0000053	kg N2O/Mile
Commuter Travel - Mass Transit	Bus	0.745	kg CO2/Mile	0.0000006	kg CH4/Mile	0.0000005	kg N2O/Mile
	Metro / Transit Rail	0.163	kg CO2/Mile	0.000004	kg CH4/Mile	0.000002	kg N2O/Mile
	Commuter Rail	0.172	kg CO2/Mile	0.000002	kg CH4/Mile	0.000001	kg N2O/Mile
	Intercity Rail	0.185	kg CO2/Mile	0.000002	kg CH4/Mile	0.000001	kg N2O/Mile
	Ferry	0.0	kg CO2/Mile	0.0	kg CH4/Mile	0.0	kg N2O/Mile
Commuter Travel - Human Powered	Walking and/or Bicycling	0	kg CO2/Mile	0	kg CH4/Mile	0	kg N2O/Mile

Existing Conditions, 2012, Total CO2e Emitted

Process Type	Vehicle Type	Global Warming Potential Factor for CO2	Global Warming Potential Factor for CH4	Global Warming Potential Factor for N2O	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
Commuter Travel - Personal Owned Vehicles	POV Passenger Car	1	21	310	CO2e	6,743,212	kg CO2e	6,743	MT CO2e
	POV SUV or Truck	1	21	310	CO2e	1,489,659	kg CO2e	1,490	MT CO2e
	POV SUV or Truck	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
	Motorcycle	1	21	310	CO2e	5,712	kg CO2e	6	MT CO2e
	Hybrid	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
Commuter Travel - Car / Van Pools	Car Pool	1	21	310	CO2e	275,275	kg CO2e	275	MT CO2e
	Van Pool	1	21	310	CO2e	146,548	kg CO2e	147	MT CO2e
Commuter Travel - Mass Transit	Bus	1	21	310	CO2e	203,052	kg CO2e	203	MT CO2e
	Metro / Transit Rail	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
	Commuter Rail	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
	Intercity Rail	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
	Ferry	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
Commuter Travel - Human Powered	Walking and/or Bicycling	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
Total Commuter Travel Emissions								8,863.5	MT CO2e

No Build, 2025, Total CO2e Emitted

Process Type	Vehicle Type	Global Warming Potential Factor for CO2	Global Warming Potential Factor for CH4	Global Warming Potential Factor for N2O	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
Commuter Travel - Personal Owned Vehicles	POV Passenger Car	1	21	310	CO2e	4,968,606	kg CO2e	4,969	MT CO2e
	POV SUV or Truck	1	21	310	CO2e	1,097,704	kg CO2e	1,098	MT CO2e
	POV SUV or Truck	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
	Motorcycle	1	21	310	CO2e	6,643	kg CO2e	7	MT CO2e
	Hybrid	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
Commuter Travel - Car / Van Pools	Car Pool	1	21	310	CO2e	202,772	kg CO2e	203	MT CO2e
	Van Pool	1	21	310	CO2e	170,429	kg CO2e	170	MT CO2e
Commuter Travel - Mass Transit	Bus	1	21	310	CO2e	236,141	kg CO2e	236	MT CO2e
	Metro / Transit Rail	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
	Commuter Rail	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
	Intercity Rail	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
	Ferry	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
Commuter Travel - Human Powered	Walking and/or Bicycling	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
Total Commuter Travel Emissions								6,682.3	MT CO2e

Build, 2025, Total CO2e Emitted

Process Type	Vehicle Type	Global Warming Potential Factor for CO2	Global Warming Potential Factor for CH4	Global Warming Potential Factor for N2O	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
Commuter Travel - Personal Owned Vehicles	POV Passenger Car	1	21	310	CO2e	5,987,925	kg CO2e	5,988	MT CO2e
	POV SUV or Truck	1	21	310	CO2e	1,324,279	kg CO2e	1,324	MT CO2e
	POV SUV or Truck	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
	Motorcycle	1	21	310	CO2e	7,068	kg CO2e	7	MT CO2e
	Hybrid	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
Commuter Travel - Car / Van Pools	Car Pool	1	21	310	CO2e	202,772	kg CO2e	203	MT CO2e
	Van Pool	1	21	310	CO2e	170,429	kg CO2e	170	MT CO2e
Commuter Travel - Mass Transit	Bus	1	21	310	CO2e	236,141	kg CO2e	236	MT CO2e
	Metro / Transit Rail	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
	Commuter Rail	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
	Intercity Rail	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
	Ferry	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
Commuter Travel - Human Powered	Walking and/or Bicycling	1	21	310	CO2e	0	kg CO2e	0	MT CO2e
Total Commuter Travel Emissions								7,928.6	MT CO2e

